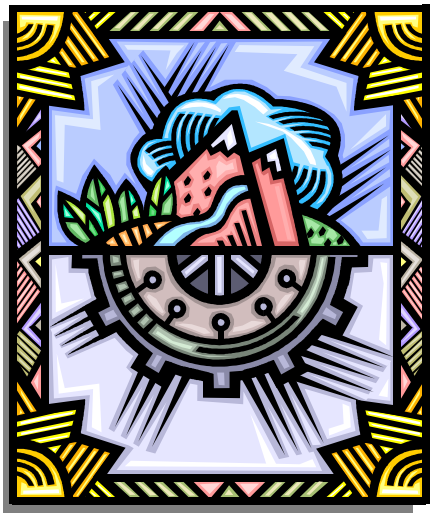
Employment-Based Prevention of Chronic Disease in Washington State, 2005



University of Washington
Health Promotion Research Center
December 2005

Funded by the U.S. Centers for Disease Control and Prevention, Grant U48/CCU009654-10
PRC Cancer Prevention and Control Research Network

EMPLOYMENT-BASED PREVENTION OF CHRONIC DISEASE IN WASHINGTON STATE, 2005

December 2005

Funded by a grant from the U.S. Centers for Disease Control and Prevention
Grant U48/CCU009654-10 PRC Cancer Prevention and Control Research Network

AUTHORS:

Patricia Lichiello, MA	University of Washington School of Public Health & Community Medicine, Department of Health Services
Jeffrey R. Harris, MD, MPH, MBA	University of Washington, School of Public Health & Community Medicine, Department of Health Services, Health Promotion Research Center; Alliance for Reducing Cancer – Northwest
Jeffrey Cross, MPH	University of Washington, School of Public Health & Community Medicine, Department of Health Services, Health Promotion Research Center; Alliance for Reducing Cancer – Northwest
Mary Kay O'Neill, MD, MBA	Washington State Health Care Authority; Alliance for Reducing Cancer – Northwest
Mark Gardner, PhD	University of Washington School of Public Health & Community Medicine, Department of Health Services

ACKNOWLEDGEMENTS:

The authors gratefully acknowledge the gracious assistance of these expert reviewers:

Deborah J. Bowen, University of Washington School of Public Health & Community Medicine, Dept. of Health Services
Peter A. Briss, U.S. Public Health Service; Centers for Disease Control and Prevention
Allen D. Cheadle, University of Washington School of Public Health & Community Medicine, Dept. of Health Services
Ralph Coates, U.S. Public Health Service; Centers for Disease Control and Prevention
Chuck DeGooyer, American Cancer Society, Great West Division
Angela Geiger, American Cancer Society, National Home Office
Ron Z. Goetzel, Cornell University Institute for Policy Research; Thomson Medstat
David Grossman, Group Health Cooperative of Puget Sound
Peggy Hannon, University of Washington School of Public Health & Community Medicine, Health Promotion Research Center
Kyle Harris, American Cancer Society, Great West Division
Maxine Hayes, State Health Officer, WA State Dept. of Health
Priscilla Holman, Office of the Director, Centers for Disease Control and Prevention
Jon Kerner, U.S. Public Health Service; National Institutes of Health
Dan Lessler, Public Health – Seattle & King County, STEPS Project
Elizabeth Majestic, U.S. Public Health Service; Centers for Disease Control and Prevention
Diane P. Martin, University of Washington School of Public Health & Community Medicine, Dept. of Health Services
Tim McAfee, Free & Clear
Michele Reyes, NCCDPHP, Centers for Disease Control and Prevention
Kurt Ribisl, University of North Carolina
Charles Santon, Weyerhaeuser Corporation
Neal Sofian, NewSof Group
Glorian Sorensen, Harvard University Dana Farber Cancer Institute
Dorothy Teeter, Public Health – Seattle & King County
Diana Vinh, Public Health – Seattle & King County, STEPS Project
Carolyn (Cindy) Watts, University of Washington School of Public Health & Community Medicine, Dept. of Health Services

The authors also gratefully acknowledge the prompt and patient help of the WA State Employment Security Dept.

Table of Contents

List of Figures (Titles shortened for listing, in some cases)

List of Tables (Titles shortened for listing, in some cases)

Employment-Based Prevention of Chronic Disease in Washington State, 2005

Executive Summary For Employer Advocates

— *A summary of the study findings for those who work with employers to implement workplace health promotion activities.*

Why Chronic Disease, and Why Employers?

Chronic diseases account for 70 percent of deaths in the U.S. each year and up to 70 percent of national health care expenditures. They cause major limitations in daily activity for 1 of 10 Americans. In Washington State, four chronic diseases—cancer, heart disease, chronic lower respiratory disease, and diabetes—account for over half of all deaths among adults. Across the state's population, as age increases, there are more new cases of chronic disease, greater proportions of the population affected, and more deaths from chronic disease. After age 45—an age often considered within the prime of a working career—chronic disease deaths among Washingtonians, especially from cancer and heart disease, rise dramatically.

The prevalence and high costs of chronic diseases are mirrored in the workplace. Nearly 63 million working Americans report having at least one chronic condition. Employers who offer health insurance face significantly higher medical care expenditures for employees with, or at risk for, chronic diseases. And all employers incur indirect health-related costs from chronic diseases—which can outpace medical care expenditures—including productivity, employee turnover and replacement, workers' compensation, and life insurance benefit costs.

Yet chronic diseases can be both prevented and managed. Unfortunately, employers nation-wide are not offering the health insurance benefits and workplace programs proven to contribute to preventing the onset of or effectively managing chronic diseases. In particular, employers under-purchase key clinical preventive services that offer the greatest value for average-risk, working-age adults. Conversely, Washington State data reveal that workers themselves are not engaging in health-related lifestyles that could prevent, delay, or manage chronic diseases, and are under-using those same key, high-value clinical preventive services.

How You Can Help Employers With Chronic Disease Prevention

Working with employers to implement health promotion activities holds the potential of reaching over 3.1 million Washingtonians age 16 and older. The findings of this study point to several ways to work most effectively with employers to help them implement health promotion activities:

I. First, Focus on Employers Who Offer Health Insurance

Employers are the source of health insurance for nearly two-thirds of Washington State's adults and children. Because they often have an employee health benefits infrastructure and culture already in place, these employers are more readily approached with health promotion

assistance. They will gain significant benefit, in particular, through advice on purchasing appropriate coverage of clinical preventive services. Three national, expert, and objective sources offer guidance on the health promotion activities, especially clinical preventive services, that are the most effective and cost-effective investment choices for employers:

- U.S. Preventive Services Task Force: *Guide to Clinical Preventive Services*. The USPSTF is an independent panel of experts administered by the federal Agency for Health Care Research and Quality. The panel systematically reviews evidence of effectiveness for clinical preventive services and issues recommendations for their appropriate application in health care settings.
- Partnership for Prevention: *Prevention Priorities: Employers' Guide to the Highest Value Preventive Health Services*. Partnership is a not-for-profit organization focusing on employers' preventive health care practices. *Prevention Priorities* reports on its systematic review and ranking, based on health impact and cost effectiveness, of 30 USPSTF-recommended clinical preventive services.
- Task Force on Community Preventive Services: *Guide to Community Preventive Services*. The Task Force is an independent panel of experts, administered by the federal Centers for Disease Control and Prevention, that systematically reviews evidence and issues recommendations for population-based interventions to promote health and prevent disease, injury, disability, and premature death.

2. Focus Information and Assistance on Large Employers (1,000 or More Employees)

This approach allows for reaching a large segment of the employee population through a small number of contacts: large employers make up less than 1 percent of Washington State's firms but account for 17 percent of all employees (over 450,000 people). It also carries the potential for creating employer leaders who change norms across the entire employer community. Large firms have substantial leverage in the marketplace, and often have designated employee benefits staff, facilitating working with them on health promotion activities.

3. Focus on Smaller Firms' Intermediaries

Over 180,000 Washington State firms have fewer than 1,000 employees. Together, these medium and small employers account for 83 percent of all employees in the state. Most rely on intermediaries for their health benefit information and assistance needs. Working with brokers, purchasing cooperatives, and other intermediaries allows for more efficiently reaching large numbers of both employers and employees through fewer points of contact.

4. Include Disadvantaged Populations in All Employer Health Promotion Assistance

All employer health promotion assistance needs to incorporate a careful examination of the characteristics of the workforce. Washington adults with lower income and education levels, for example, have higher incidence, prevalence, and mortality from chronic disease. Incidence and mortality also vary by race and ethnicity. And lower incomes are associated with less healthy eating, less physical activity, and increased tobacco use. To be most effective, health promotion activities must be appropriate for the workforce at hand.

This Study is a Resource for Employer Advocates' Efforts

In 2003, the U.S. government called for the nation's employers to implement workplace health promotion activities aimed at chronic disease. The data and literature analysis and employer interviews in this study offer a rich information resource developed to support those working with Washington State employers—and the employers themselves—in meeting this challenge.

Employment-Based Prevention of Chronic Disease in Washington State, 2005

Executive Summary For Employers

Why Focus on Chronic Disease, and Why Focus on Employers?

Chronic diseases are long-term, often permanent, adverse health conditions that account for 70 percent of deaths in the U.S. each year and 40 percent of the nation's annual health care expenditures. In Washington State, four chronic diseases—cancer, heart disease, chronic lower respiratory disease, and diabetes—account for over half of all adult deaths. Each successive age group of Washingtonians has more new cases, greater proportions of people affected, and more deaths from chronic disease than the one before it. After age 45—an age often considered in the prime of a working career—chronic disease deaths among Washingtonians, especially from cancer and heart disease, rise dramatically.

The prevalence and high costs of chronic diseases are mirrored in the workplace. One of every ten Americans faces major limitations in daily activity caused by a chronic condition, and nearly 63 million *working* Americans report having at least one such condition. Research among employers who offer health insurance reveals they have much higher medical care expenditures for employees with, or at risk for, chronic diseases. A seminal study of nearly two million U.S. employees found that medical care expenditures averaged close to two times more for employees with cancer, heart disease, or diabetes than for those without disease. Expenditures for employees just at *risk* for chronic disease—measured by blood pressure, body weight, and cholesterol—averaged over 50 percent more than for those at low risk. And whether or not they offer health insurance, all employers incur indirect health-related costs from chronic diseases, including lost productivity (absenteeism and presenteeism), employee turnover and replacement, workers' compensation, and life insurance benefit costs.

Yet chronic diseases can be both prevented and managed. Unfortunately, employers nationwide do not offer those cost-effective and cost-*saving* health promotion services proven to contribute to preventing or effectively managing chronic diseases. In particular, they underpurchase key clinical preventive services that offer the greatest value, as measured by health outcomes and cost effectiveness, for average-risk, working-age adults—such as colorectal cancer screening, influenza vaccination, and tobacco cessation counseling and medication. At the same time, Washington State data reveal that insured workers themselves are underusing those same key, high-value clinical preventive services, and are not engaging in health-related lifestyles that could prevent, delay, or manage chronic diseases.

What Can Employers Do?

Employers can implement health promotion activities through their health insurance benefits and through specific workplace policies and programs. They can enhance use of these services through effective and targeted communication and through tracking demand and use. But the most important thing for employers to do is to invest their health promotion dollar wisely:

1. Buy, Adopt, and Implement Benefits, Policies, and Programs Proven to Work

Many key clinical preventive services make cost-effective, and in some cases, cost-*saving* investments. They can be included in a health insurance benefit or offered as a separate workplace health promotion program:

- Smoking Cessation Counseling and Medications, and Influenza Vaccination. These two clinical preventive services save lives, improve health, and are proven to be cost-saving to employers.
- Breast, Cervical, and Colorectal Cancer Screening, and Blood Pressure and Cholesterol Risk Detection and Management. These cost-effective screens detect risk early and improve and save lives.
- Physical Activity and Healthy Eating Promotion, with Emphasis on Weight Control. Low physical activity and unhealthy eating are important contributors to many chronic diseases. Health promotion activities that target these health-related lifestyles, such as group physical activity programs, are effective in creating short term change; their contribution to sustained change is not yet certain.
- Smoking Bans and Stair-Use Reminders. No-smoking policies limit exposure of non-smoking employees to environmental tobacco smoke. Stair-use reminders posted next to elevators (a *point-of-decision prompt*) motivate people to use the stairs. The best prompts are adapted to the target population.

2. Align Employee Incentives Toward Receiving Services and Participating in Programs

- Reduce or Eliminate Cost Sharing. Reducing out-of-pocket costs has been proven to increase use of breast cancer screening, tobacco cessation treatment, and vaccinations. Reducing or eliminating these costs for other known high-value services—such as screens for blood pressure, cervical cancer, cholesterol, and colorectal cancer—could increase their use, as well.
- Provide Easy Access and Use. Reducing structural barriers—such as location, hours of operation, and availability of child care—has been shown to increase use of breast and colorectal cancer screening. Creating or improving access to places for physical activity, including walking, also increases the potential for employees to participate.

3. Communicate "Why" and "How" Information and Track Results

- Offer Compelling Insight, Rationales, and Guidance for Using Health Promotion Services and Activities. Motivating employee participation requires communicating about *why* and *how* to use the benefits, policies, and programs being offered. Specifically, health insurance benefits that include no-cost screening, smoking cessation, and vaccinations are more likely to be used if they are promoted using standard marketing and communication principles.
- Assess Employee Needs. Surveys, such as health risk assessments (HRA), can generate information on employee health status and health risks that helps employers make smart, targeted health promotion investments. Survey data, which should be anonymous to the employer, also will establish benchmarks against which employers can assess the effectiveness of their purchases over time—and then adjust.

This Study is a Resource for Employers' Efforts

In 2003, the U.S. Department of Health and Human Services called for the nation's employers to implement workplace health promotion activities aimed at chronic disease. The data and literature analysis and employer interviews in this study offer a rich information resource developed to support Washington State employers in meeting this challenge.

Employment-Based Prevention of Chronic Disease in Washington State, 2005

Introduction

In 2003, the U.S. Department of Health and Human Services issued a call to action to the nation's employers to implement workplace health promotion activities aimed at chronic disease. The report called attention to rising employee health care costs associated with chronic diseases and advocated for collaboration at all levels of society—public policy makers, private foundations, health care providers and insurers, businesses, communities, schools, families, and individuals—to control and prevent the chronic conditions that threaten the health of our nation's citizens and the financial strength of its private-sector institutions. The report concluded:

> *Public and private policies need to focus on sustained efforts to encourage positive behaviors, building on proven, successful models. Key to these efforts is the recognition that the worksite is a place that can be conducive to good health.*[1]

Why the Focus is on Chronic Disease

The Burden of Chronic Disease in the Population is Striking

Chronic diseases are long-term, often permanent, adverse health conditions. In large part because of their longevity, these diseases make a striking contribution to the burden of mortality and disability in the U.S. Each year, chronic diseases account for 70 percent of deaths nationwide and cause major limitations in daily activity for 1 of every 10 Americans. Approximately 63 million working Americans report having at least one chronic condition.[2, 3]

The number of deaths related to chronic disease, as well as their incidence (number of new cases reported) and prevalence (proportion of the population affected), rise with age. This means that across the population, from our youngest to oldest citizens, there are more new cases of chronic diseases, greater proportions of people affected, and higher mortality rates from chronic disease as age increases.

In Washington State, four chronic diseases account for over half of all deaths among adults age 20-64: they are cancer (30 percent), heart disease (18 percent), chronic lower respiratory disease (2 percent), and diabetes (2 percent). Although cancer and heart disease are leading causes of death among all adults in this age group, adults age 45-54 have a cancer mortality rate three times higher than those in their mid-thirties to early forties, and adults age 55-64 a rate 11 times higher. Heart disease mortality takes similar leaps forward between age groups.

Chronic Diseases Account for a Hefty Share of Health Care Costs

Chronic diseases are not only common, disabling, and deadly: they also are costly. They account for at least 40 percent of the nation's health care expenditures each year.[4] In 2002,

the most recent year for which data are available, these expenditures totaled $1.6 trillion, 15 percent of the nation's gross domestic product.[5] Research indicates that a substantial proportion of just the annual increase in national health care expenditures—an increase greater than 5 percent annually since the late 1990s—can be directly linked to chronic disease. Between 1987 and 2000, as much as 61 percent of the rise in health care expenditures was directly linked to treatment for 15 health conditions, of which most were chronic diseases: including cancer, diabetes, heart disease, high blood pressure, stroke, and upper and lower respiratory disease, among others. In some cases, it was not an increase in the number of new cases but the rising cost of care that was responsible for the increase in expenditures.[6]

The link between chronic disease and higher health care expenditures is embodied in the workplace. A 1998 study of six large public and private-sector employers in the U.S. revealed that employer medical care expenditures were significantly higher for employees who were at risk for seven chronic conditions: tobacco use, sedentary lifestyle, high stress, high blood pressure, high blood glucose, extreme over- or underweight, and depression.[7] Another seminal study, conducted by the University of Michigan's Health Management Research Center over 20 years (ending in 1998), examined medical care costs for nearly 2 million U.S. employees. Again, researchers found a direct relationship between chronic disease and higher medical care expenditures. Employees with cancer, heart disease, or diabetes, for example, had medical care expenditures averaging 182 percent more than expenditures for those without disease. Medical care expenditures for employees *at risk* for chronic disease—measured by screening for blood pressure, body weight, and cholesterol—averaged 53 percent higher than for those at low risk. And for every decrease in the number of risk factors per employee there was a decrease in medical care expenditures of $153 per risk, per year. But for every increase in the number of risk factors per employee, expenditures increased approximately $350 per risk, per year.[8]

Employers also incur indirect health-related business costs as a consequence of chronic disease in their workforce, as well as from the presence of chronic diseases in employees' family members and dependents. These costs include the effects of chronic disease on employee productivity, which is measured by *absenteeism*—including sick days taken, short-term disability time off, and days taken to care for family members who are chronically ill—and *presenteeism*, a measure of on-the-job effectiveness. These indirect productivity-related costs can outpace employers' medical care expenditures.[9] Other important indirect costs include employee turnover and replacement costs, workers' compensation costs, and life insurance benefit costs. Unlike direct health insurance costs, which can be negotiated with insurers and providers, employers bear the brunt of these indirect business costs.

How Health Promotion Addresses Chronic Diseases

Health Promotion Activities Target Health Behaviors

We know that chronic diseases are common, disabling, and costly. But we also know that they are often preventable and manageable. Health promotion activities are designed to achieve both outcomes: to prevent the onset of chronic diseases and their associated personal health and financial costs, and to help people who are already affected by these diseases

effectively manage them. Toward these ends, health promotion activities are directed at people's everyday *health behaviors*—that is, the things individuals do to protect, maintain, or promote their health.[10] Although health promotion activities address health behaviors that are within an individual's control, it is important to acknowledge that these behaviors also are deeply affected by an individual's social and economic environment—including the environment of the workplace.

Health behaviors can be thought of as two types of activity: *health-related lifestyles* and *use of clinical preventive services*. Health-related lifestyles include, for example, healthy eating, engaging in appropriate levels of physical activity, avoiding smoking, and maintaining a healthy body weight. Use of clinical preventive services includes using specific health care services aimed at preventing disease entirely or screening to detect disease early. Clinical preventive services include, for example, smoking cessation treatment, vaccination, and screening for cancer, high blood pressure, and high cholesterol.

Health Promotion Guidelines Promote Health Behaviors

Much has been learned in the past 20 years about which health behaviors to promote because of their effectiveness and cost-effectiveness—and much has been learned, as well, about the effectiveness and cost-effectiveness of the efforts to promote them. Three expert, objective sources summarize what has been learned nationally and offer guidelines for action:

- The U.S. Preventive Services Task Force (USPSTF): *Guide to Clinical Preventive Services*. The USPSTF is an independent panel of experts administered by the federal Agency for Health Care Research and Quality. The panel systematically reviews evidence of the effectiveness of clinical preventive services and issues recommendations for their appropriate application in health care settings, particularly by primary care providers.[11]
- The Partnership for Prevention: *Prevention Priorities: Employers' Guide to the Highest Value Preventive Health Services*. The Partnership for Prevention is a not-for-profit organization that focuses on preventive health care practices of employers. *Prevention Priorities* reports on the Partnership's expert, systematic review and ranking of 30 USPSTF-recommended clinical preventive services. The ranking is based on the health impact and cost effectiveness of the services.[12]
- The Task Force on Community Preventive Services: *Guide to Community Preventive Services* (the *Community Guide*). The Task Force on Community Preventive Services is an independent panel of experts administered by the federal Centers for Disease Control and Prevention (CDC). The *Community Guide* systematically reviews evidence and provides recommendations for population-based interventions to promote health and prevent disease, injury, disability, and premature death. The recommendations are targeted to communities and health care systems.[13]

Together, these three sources offer recommendations for health promotion activities that have been shown to be most effective at influencing health-related lifestyles, and guidance on effective and cost-effective clinical preventive services for chronic disease prevention and management.

Workplace Health Promotion and Employee Health Behaviors

Working with employers to implement health promotion activities is a powerful way to reach a great number of people. In Washington State, over 3.1 million adults age 16 and older—nearly 95 percent of the state's labor force—are employed.[14] National data suggest these employees spend anywhere from 30 to 50 percent of their waking hours at work.[15] While at the workplace, employees essentially become part of small communities where the social environment can be influenced to promote health.[16] As a consequence of their numbers, time spent at the workplace, and the nature of the social environment at the workplace, employees are a prime audience for health promotion activities.

Data from Washington State's Behavioral Risk Factor Surveillance System indicate another reason for implementing health promotion activities at the workplace: Washington workers are not engaging in health-related lifestyles that could prevent, delay, or manage chronic diseases—their overall leading cause of death. For example, of Washington workers age 18-64 *who have health insurance*, 20 percent smoke, 44 percent do not meet recommended guidelines for physical activity, and 59 percent are overweight or obese. Nearly 80 percent do not consume recommended amounts of fruits and vegetables daily. And data reveal that this low engagement in healthy lifestyles begins at a young age: for example, 40 percent of Washingtonians age 18-24 are already overweight or obese—a proportion that rises to over 70 percent with age.[17]

Washington workers also under-use key, high-value clinical preventive services: 72 percent of *insured* Washington workers do not get an annual influenza vaccination. Fifty-three percent are not current in their screening for colon cancer, the second leading cancer killer for all adult Washingtonians. And 25 percent of insured female workers age 40-64 do not get recommended mammography screening for breast cancer, the second leading cancer killer for adult Washington women.

Workplace Health Promotion and Employer Investment Returns

Workplace Health Promotion Activities Contribute to Restraining Health-Related Expenditures

In 2002, workplace-based insurance covered 65 percent of all insured Americans under age 65.[18] In providing this benefit, employers have faced rising premiums since the 1980s. They gained some control over premium expenditures in the early 1990s by turning to managed care, but this strategy proved ineffective at controlling expenditures over the long term. In the mid 1990s employer's premiums began another steep upward climb, reaching double-digit increases each year between 2000 and 2004. By 2005, though the increase had slowed to 9.2 percent it still outpaced both inflation and workers' wages by approximately 6 percentage points, each. Between 2000 and 2005, employer premiums increased 73 percent.[19]

This rising trend in employer health insurance premiums holds in Washington State. Between 2003 and 2004, for example, nearly 60 percent of 200 employers in a statewide survey saw their premiums increase between 11 and 30 percent. Firms in the survey with 50

or fewer employees—which account for 84 percent of all firms in the state—reported experiencing double-digit premium rate increases since 2000.[20]

Employers' need to restrain rising medical and productivity-related health care expenditures has renewed their interest in health promotion activities. And research indicates that these activities are up to the task. The Partnership for Prevention's *Prevention Priorities* research on the health impact and cost effectiveness of clinical preventive services found, for example, that investing in tobacco cessation treatment and influenza vaccination yields cost savings for employers.

But Employer Use of Cost-Effective Health Promotion Activities Lags

Employers who implement health promotion activities have no standard defined program configurations or templates to which to turn. In their absence, their activities vary considerably across industries and by firm size, location, and workforce demographics. Employer efforts generally organize into three categories:

- Health Insurance Benefits. Employee health insurance benefits that include coverage of preventive care services, particularly clinical preventive services.
- Workplace Policies. Defined as workplace-specific actions initiated and implemented by employers, such as maintaining a smoke-free workplace or posting stair-use reminders next to elevators.
- Workplace Programs. Defined as external products or activities employers adopt or purchase for their employees' use. For example, an employer might adopt a Web-based program to promote and track physical activity, or purchase fitness center memberships for employees.

Joint research by the Partnership for Prevention and the *Mercer 2001 National Survey of Employer-Sponsored Health Plans* revealed that nationally, only 41 percent of employers nationwide offer at least one of 14 workplace health promotion activities included in the survey, including clinical preventive services.[22] In particular, employers are under-purchasing key clinical preventive services that the Partnership's *Prevention Priorities* found offer the greatest value for average-risk, working-age adults. For example, only 68 percent of all employers who offer health insurance cover colorectal cancer screening, 55 percent cover influenza vaccination, and 10 percent cover tobacco cessation counseling and medication. Yet influenza vaccination and tobacco cessation counseling are cost saving to employers. In Washington State, a 2004 statewide survey of 200 employers found that only 22 percent of responding firms offered some form of "wellness plan."[20]

Returns From Health-Related Lifestyle Activities Differ From Those Gained From Clinical Preventive Services

Employers—or any organization sponsoring health promotion activities—face a conundrum in providing these activities: that is, in general, lifestyles such as tobacco use, engaging in adequate physical activity, or maintaining a healthy body weight are much more important contributors to employees' health and health care costs than are use of clinical preventive services. Yet the tools to promote healthy lifestyles are not as effective in the long term as

those designed to increase use of screening and other clinical preventive services. Consequently, workplace programs that focus on health-related lifestyles can certainly generate improvement in the short term—such as increased physical activity and lower body weight—but their long-term effectiveness at maintaining these lifestyles is as yet unclear.

Fortunately, there is some cross-over between health-related lifestyle activities and clinical preventive services. For example, one of the most cost-effective clinical preventive services, tobacco cessation counseling and medications, addresses an important lifestyle: tobacco use. Another highly cost-effective clinical preventive service, influenza vaccination, works in concert with lifestyle activities such as increased physical activity and weight loss to improve chronic disease risk factors—such as those for heart disease—and also helps avoid exacerbation of existing chronic disease. By optimizing their health insurance benefits to include proven high-value, cost-effective clinical preventive services, employers make an investment that works together with health promotion lifestyle activities to affect the incidence and prevalence of chronic diseases in their workforce.

Washington State Employment-Based Health Promotion Activities

This study, sponsored by the Alliance for Reducing Cancer, Northwest (ARC NW) in collaboration with the University of Washington Health Promotion Research Center (HPRC), is designed to create a foundation on which to build knowledge about the health promotion activities of employers in Washington State.[23] The study asks four questions:

- What does the workforce and the employer community in Washington State look like?
- What is the status of employer-sponsored health insurance in Washington State?
- What can published, publicly available information tell us about the health promotion activities of employers in Washington State, and how do these activities compare with nationally known best practices?
- What can employers and their colleagues tell us about their health promotion efforts and needs?

The findings of this initial study offer a lay-of-the-land with regard to information that can be readily accessed through publicly available channels about employment-based health promotion activities in Washington State, and point to gaps in knowledge and opportunities for action.

Study Components

The primary research approach for this work was a data, literature, and World Wide Web (Web) search and review. This was supplemented with a small set of key informant interviews. Overall, the study included these five components:

- Developing a short, current primer on employment in the state, including demographic and health status characteristics of the workforce, types of industry and wages, and data on availability and uptake of employer-sponsored health insurance. This research laid the groundwork for understanding the employer community's health promotion needs. The research findings are described in Part I: Primer on Washington State Employment.

- Reviewing the research literature, grey literature, and Web-based information on the health promotion activities of employers in Washington State. This research starts a foundation of knowledge about Washington State employers' current health promotion efforts. The findings are described in Part II: Employment-Based Health Promotion Activities in Washington State – Literature Review
- Reviewing the research literature on the current state of the art in health risk assessment. This research helps evaluate whether current health risk assessment tools are appropriate and effective in assessing, responding to, and tracking Washington State employee health promotion needs. The findings are described in Part III: Employer Health Risk Assessment Activities.
- Conducting interviews with a small set of employers and stakeholders who work with employers in Washington State, such as brokers, insurers, and purchasing cooperatives. This research also contributes to a foundation of knowledge about the health promotion efforts of employers in the state, and triangulates with the literature and Web research. The findings are described in Part IV: Washington State Employers' Thoughts on Employment-Based Health Promotion Activities
- Reviewing and correlating the research findings and developing a set of recommendations for further action. The recommendations offer suggestions for effective next steps for designing and fielding employer health promotion assistance in Washington State. They are offered in Part V: Recommendations.

Together, the findings from each of these research components offer a basic framework for beginning to understand the employer community in Washington State and its health promotion assistance needs. The burden of chronic disease in the population, and the link between chronic disease and employers' direct and indirect health expenditures, suggest there are both health status and financial gains to be made in helping working-age Washingtonians prevent and manage chronic disease. This study offers ARC NW and HPRC a foundation on which to develop and enhance their efforts to promote and support health promotion activities in Washington State workplaces.

Introduction References

1 U.S. Dept. of Health and Human Services. 2003. *Prevention Makes Common "Cents."* http://aspe.hhs.gov/health/prevention/.

2 CDC, National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP). *Chronic Disease Prevention*, www.cdc.gov/nccdphp/overview.htm.

3 NCQA. *The State of Managed Care Quality, 2001: The Business Case for Health Care Quality.* www.ncqa.org/somc2001/BIZ_CASE/SOMC_2001_BIZ_CASE.html.

4 See, for example: Cohen JW and NA Krauss. Spending and service use among people with the fifteen most costly medical conditions, 197. *Health Affairs* 22(2): 129-138; and CDC, NCCDPHP. *Chronic Disease Prevention: Preface*. http://198.246.96.2/nccdphp/burdenbook2004/preface.htm

5 Levit K, Smith C, Cowan C, Sensenig A. Catlin A, and Health Accounts Team. Health spending rebound continues in 2002. *Health Affairs* 23(1): 147-159.

6 Thorpe KE, Florence CS, and P Joski. Which medical conditions account for the rise in health care spending? *Health Affairs* (Web Exclusive: 25 August 2004): W4-437-445.

7 Goetzel R, Anderson DR, Whitmer RW, Ozminkowski RJ, Dunn RL, Wasserman J, Health Enhancement Research Organization. The relationship between modifiable health risks and health care expenditures: An analysis of the multi-employer HERO health risk and cost database. *JOEM* 40(10), October 1998: 843-854.

8 O'Donnell MP. "Employer's Financial Perspective on Workplace Health Promotion." In O'Donnell M (ed.) *Health Promotion in the Workplace* (3rd Edition), Chapter 2. Albany (NY): Delmar Press, a division of Thomson Learning, 2001.

9 Goetzel RZ, Guindon AM, Turshen IJ, and RJ Ozminkowski. Health and productivity management: Establishing key performance measures, benchmarks, and best practices. *J Occup Environ Med* 43(10): 10-17.

10 *Webster's Online Dictionary, The Rosetta Edition.*™ www.websters-online-dictionary.org.

11 U.S. Preventive Services Task Force, Guide to Clinical Preventive Services, Second Edition. International Medical Publishing, Inc., 1996. www.ahrq.gov/clinic/uspstfix.htm. See also: Pocket Guide 2005. www.ahrq.gov/clinic/pocketgd.htm.

12 Partnership for Prevention, Prevention Priorities: Employers' Guide to the Highest Value Preventive Health Services. www.prevent.org.

13 Task Force on Community Preventive Services, Guide to Community Preventive Services. www.thecommunityguide.org.

14 Washington State Employment Security Department. *Resident Labor Force and Employment in Washington State and Labor Market Areas.* (September 2005 Preliminary; August 2005 Revised.) www.workforceexplorer.com.

15 U.S. Department of Labor. 1999. *futurework: trends and challenges for work in the 21st century.* See also: Gangrade S, Pendyala RM, and RG McCullough. A nested logit model of commuters' activity schedules. *J Trans and Statistics* 5(2/3), 2002: 19-36.

16 Jacobson MI, Yenney SL, and JC Bisgard. An organizational perspective on worksite health promotion. *Occup Med.* 5(4), Oct-Dec 1990: 653-664.

17 University of Washington Health Promotion Research Center analysis of BRFSS data provided by the Washington State Department of Health, September 2004.

18 National Center for Health Statistics. 2004. *Health, United States, with Chartbook on Trends in the Health of Americans.* Hyattsville, MD.

19 Gabel J, Claxton G, Gil I, Pickreign J, Whitmore H, Finder B, Hawkins S, and D Rowland. Health benefits in 2005: Premium increases slow down, coverage continues to erode. *Health Affairs* 24(5): 1273-1280.

20 Kibble & Prentice, "Kibble & Prentice Releases Findings of Annual Employer Survey - Finds Increase in Costs, Decrease in Benefits and Transfer of Burden to Employees." Press release. July 14, 2004. www.kpcom.com/aboutus/survey.asp.

21 Goetzel RZ, Juday TR, and RJ Ozminkowski. *What's the ROI?: A Systematic Review of Return-on-Investment Studies of Corporate Health and Productivity Management Initiatives.* AWHP's Worksite Health, Summer 1999.

22 Bondi MA, Harris JR, Atkins D, French ME, and B Umland. Employer coverage of clinical preventive services in the United States. *American Journal of Health Promotion* (in press).

23 For information on the Alliance for Reducing Cancer, Northwest (ARC NW), see www.arcnw.org. Information on the parent organization, the Cancer Prevention and Control Research Network, can be found in: Harris JR, Brown PK, Coughlin S, et al. The cancer prevention and control research network. *Prev Chronic Dis* 2(1): A21. Epub 2004 Dec 15. For information on the Health Promotion Research Center, see http://depts.washington.edu/hprc/.

Part I: Primer on Washington State Employment

I. Health Status and Health Behaviors of Employed Washingtonians

To design effective employee health benefits, policies, and programs requires a basic understanding of the health needs of Washington workers—that is, their health status and health behaviors. What are the predominant health issues for the state's working-age population, particularly for those who are working and have health insurance? What do working-age Washingtonians do that enhances or detracts from their overall health?

Preface: Health Data

Surveys are a common source of data, at both the state and national levels, on people's health status and health behaviors. A survey frequently used in health policy research is the *Behavioral Risk Factor Surveillance System* (BRFSS) survey, which measures health status and health behaviors of adults age 18 and older in each of the states. This survey also collects information on employment and health insurance status. Each state conducts the survey monthly and reports the results to the national Centers for Disease Control and Prevention (CDC). The CDC posts annual average BRFSS data for individual states on its Web site, and aggregates state data to create national averages. This allows for state-state and state-national comparisons.[1]

The focus of this report is on *working-ag*e Washingtonians, in particular those who are employed. Data on employees and employment collected at the state and national levels (such as data described in sections II and III that follow) define *working-age* as 16 and older (without an upper limit).[2] But health status and health behavior data, such as BRFSS data, are collected for adults age 18 and older. Consequently, the populations reflected in employment data and health data are not entirely analogous.

Health Status Fast Facts

- Chronic diseases, including cancer, heart disease, chronic lower respiratory disease, and diabetes, are among the leading causes of death and disability in Washington State, as in the nation.
- Cancer, followed by heart disease, is the most common cause of death for working-age Washingtonians.
- Six of every ten Washington workers with health insurance are overweight or obese—a proportion also found in the state's population as a whole.
- Chronic disease mortality, incidence, and prevalence among working-age Washingtonians generally rise with age and vary by gender.
- Less than half of working, insured Washingtonians receive age-appropriate colorectal cancer screening.
- Many chronic diseases—such as heart disease, colorectal cancer, and diabetes—and the health behaviors that contribute to them are most common among adult Washingtonians with low income and education.

A. Health Status of Washington's Adult Population

Health status can refer to the level of health of an individual, a specific group, or a large and varied

population. Understanding health status of a person or group can help in identifying areas for taking specific actions for health improvement.

Individuals can assess their own health status—this is a subjective assessment that often uses qualitative questionnaires or interviews. For example, one way to think about health status is to assess whether people "feel healthy." In response to the 2003 BRFSS question, *How is your general health?,* 86 percent of adult Washingtonians reported being in good, very good, or excellent health. Interviewees' reporting of good-to-excellent health declined by nearly 20 percentage points from age 18 up: from 91 percent of those 18-24 to 73 percent of those 65 and above—still commonly thought of as retirement age.[3]

Subjective self-reporting of good health is useful because it is simple and predictive of health care utilization, but it does not offer very actionable information about the health of a population. A more complete and actionable assessment of health status employs various measures of disease-related mortality, the *incidence* and *prevalence* of disease and disability, and the health behaviors that can lead to these conditions:

- Incidence means the number of new cases of a disease, disability, behavior, or death reported in a given time period (often a single year) for a defined group of people.
- Prevalence means the proportion of the population affected.

A.1 Chronic Disease in the U.S.

Chronic diseases are among the leading causes of death and disability in both the U.S. and Washington State. Nationwide, five of the six leading causes of death are chronic diseases:[4]

- Heart disease
- Cancer
- Stroke
- Chronic lower respiratory diseases
- Diabetes

Approximately 63 million working Americans report having at least one chronic condition, making chronic diseases an important consideration for employers.[5] Chronic diseases factor into the overall cost of health insurance as well as other health-related costs for both employees and their employers. Chronic diseases contribute, for example, to workplace productivity costs, including worker absenteeism and decreased on-the-job effectiveness (sometimes called *presenteeism*[†]). Recent, albeit limited, national research suggests that indirect productivity costs account for between 20 and 60 percent of the financial burden borne by employers as a consequence of employee illness.[6] Chronic diseases also contribute to workers' compensation, life insurance, and employee replacement costs.

[†] *Presenteeism* currently has several definitions, all relating in various, yet dissimilar, ways to on-the-job effectiveness. The definition used in this paper was developed by MA Clark. See: MA Clark, Vision benefits aid attack on "present-eeism," *Employee Benefit News,* Dec. 2000. www.benefitnews.com.

A.2 Chronic Disease Among Adult Washingtonians.

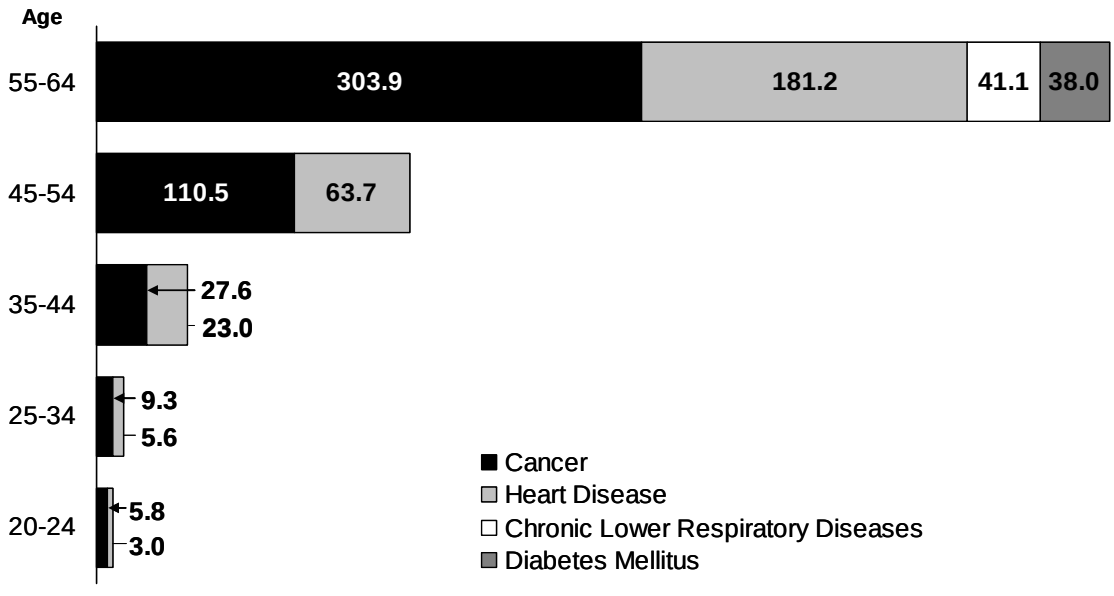
Mortality, Incidence, and Prevalence

Mortality, incidence, and prevalence data collected by the Washington State Department of Health (DOH) reveal the extent of chronic diseases among working-age adult Washingtonians. These data indicate that adults age 45 and older account for a substantial portion of the population's burden of chronic disease mortality, incidence, and prevalence. These adults comprised 39 percent of all employed Washingtonians in 2003, or 1.1 million people. Consequently, their health status is an important concern for employers.

Mortality. Four of the five most prevalent chronic diseases nationwide are among the top nine leading causes of death for Washingtonians age 20-64: they are cancer, heart disease, chronic lower respiratory disease, and diabetes. In 2003, cancer and heart disease—the two most prevalent chronic diseases nationwide—accounted for 30 percent and 18 percent of all deaths, respectively, among Washington adults age 20-64, followed by chronic lower respiratory diseases (2.3 percent) and diabetes (2.1 percent).[7] Although stroke is the third leading cause of death for adults nationally (stroke mortality is tracked separately from heart disease) it is not among the top ten leading causes for adult Washingtonians younger than 65.

Mortality data by age for 2003 indicate that deaths from cancer and heart disease rise dramatically after age 45, as do deaths from chronic lower respiratory disease and diabetes after age 55 (Figure 1).[8]

Figure 1. The Top Four Chronic Diseases Among the Leading Causes of Death for Washington State Adults Age 20-64, 2003 (mortality rates per 100,000)*



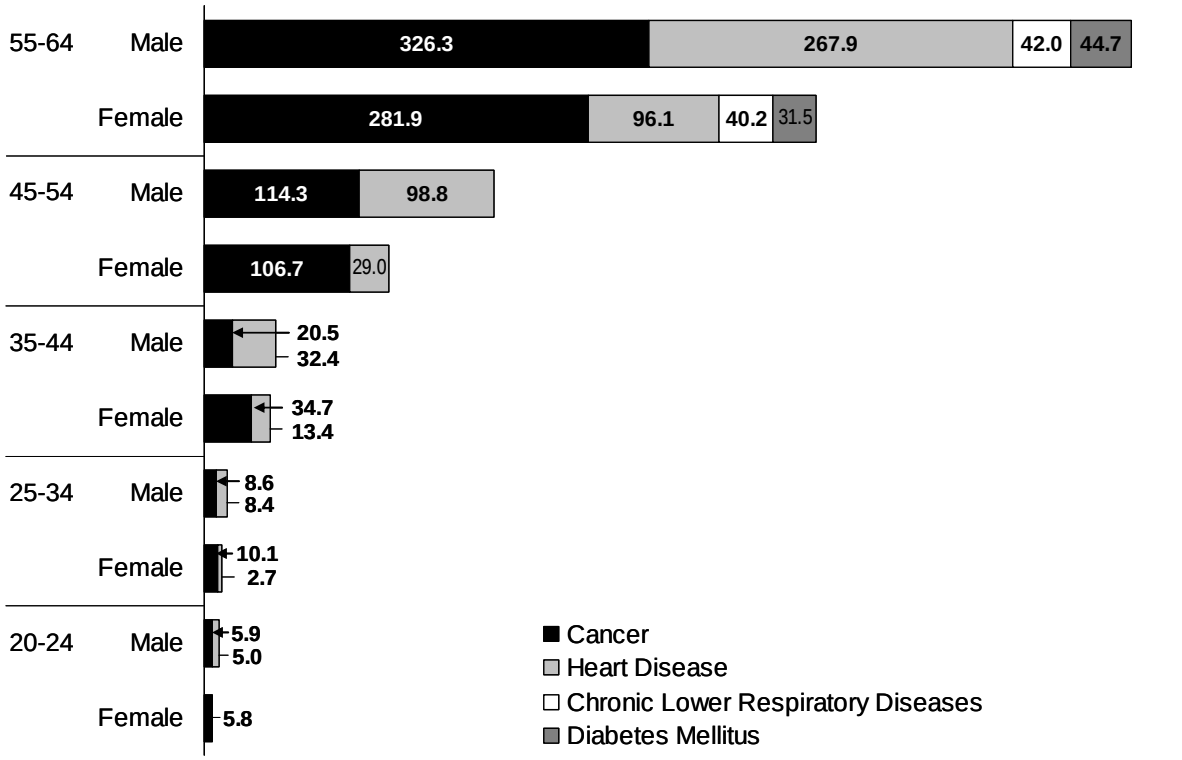
* Leading causes of death are taken from cause of death listed on death certificates.

Source: Center for Health Statistics, WA State Dept. of Health. Mortality Table C3. Leading Causes by Age Group and Sex for Residents, 2003. www.doh.wa.gov/ehsphl/chs/chs-data/death/dea_VD.htm

Mortality data by gender indicate that for both women and men, lung cancer is the leading cancer killer: at 47.5 deaths per 100,000 women and 66.7 per 100,000 men. Colorectal cancer is the second leading killer for the genders combined, at 35.2 deaths per 100,000—but is the third for each gender individually (15.3 for women, 19.9 for men). For women, alone, the second leading cancer killer is breast cancer (24.0); for men it is prostate cancer (27.4).[9]

Heart disease mortality rates in 2003 were consistently higher for men than for women, and the difference increased with age (Figure 2). Mortality from chronic lower respiratory disease—a leading cause of death for Washingtonians age 55 and older, only—was higher for men in this age group than for women (though the difference may be quite small). Diabetes, also a leading cause of death only for this age group, also was higher for men than for women.

Figure 2. The Top Four Chronic Diseases Among the Leading Causes of Death for Washington State Adults Age 20-64, by Gender, 2003 (rate per 100,000 in each age group)*



* Mortality rates based on cause of death listed on death certificates.

Source: Center for Health Statistics, WA State Dept. of Health. Mortality Table C3. Leading Causes by Age Group and Sex for Residents, 2003. www.doh.wa.gov/ehsphl/chs/chs-data/death/dea_VD.htm

Incidence and Prevalence. Incidence and prevalence data are collected at the state level for only a small set of chronic conditions, and they are analyzed by different age groupings. Still,

data from 2002 indicate that just as mortality from chronic diseases varies by age, incidence does, as well. For example:

- Lung cancer incidence rose with age among adult Washingtonians, with much higher incidence among adults age 45 and older:

	25-34	35-44	45-54	55-64	65-74
2002: Lung Cancer Incidence (per 100,000)	1.3	8.3	33.5	150.4	346.2

- Breast cancer incidence was much higher among female Washingtonians age 45 and older:

	20-44	45-64	65+
2002: Female Breast Cancer Incidence (per 100,000)	54.6	380.8	591.9

- Colorectal cancer was relatively rare among Washingtonians younger than age 45, but its incidence was much higher for both women and men after that age: [10]

	25-34	35-44	45-54	55-64	65-74
2002: Colorectal Cancer Incidence (per 100,000)	2.7	11.5	36.0	87.7	206.2

Prevalence also varies by age. Among the four most common chronic disease-related causes of death in Washington State, prevalence data are available for diabetes, only. The 2003 BRFSS indicates that diabetes prevalence among Washington adults increases with age, and has been increasing among those age 35 and older over the past several years:[11]

	18-24	25-34	35-44	45-54	55-64	65+
2003: Diagnosed with Diabetes (Prevalence)	0.6%	1.9%	3.5%	6.9%	12.6%	15.9%

A.3 Overweight and Obesity Among Adult Washingtonians

Excess weight has a high correlation with an individual's health status. In particular, the conditions of being overweight or obese are associated with increased risk of developing an array of chronic diseases, such as cancers of the breast, prostate, and colon; coronary heart disease; congestive heart failure; ischemic stroke; Type 2 diabetes; and osteoarthritis. This relationship between excess weight and chronic disease, especially the leading chronic-disease killers, is an important consideration for employers. Excess weight also contributes to adverse health conditions such as high blood pressure, high blood cholesterol, gall stones, pregnancy complications, poor female reproductive health, and bladder-control problems.[12]

Overweight and Obesity Incidence and Prevalence

The number of people who are overweight or obese has risen dramatically in the U.S. in the past 20 years. This trend holds in Washington State, where the prevalence of adult obesity increased 112 percent between 1991 and 2001.[13] The 2002 BRFSS indicates that six of every ten working-age adult Washingtonians were overweight or obese that year.[14] Over one in

three adults in every age category beginning at age 18 was overweight or obese, and this prevalence increased dramatically until age 64:

	18-24	25-34	35-44	45-54	55-64	65+
2002: Adults who are overweight or obese	38.6%	54.9%	60.7%	65.1%	70.8%	61.8%

Among working adult Washingtonians who have health insurance, BRFSS data for the years 2001 and 2002 (combined) indicate that 59.3 percent were overweight or obese. Thus, just as with the overall population of Washington adults, six out of ten insured workers were either overweight or obese in the 2001-2002 period.

With the numbers of overweight and obese adults on the rise, associated medical expenditures can be expected to rise as well. Using data from the Medical Expenditure Panel Survey (MEPS), the National Health Interview Survey, and the BRFSS, researchers recently calculated that obesity-related medical expenditures in Washington State for the 1998-2000 period amounted to $1.33 billion dollars. This placed Washington at number 20 among the states, ranked from highest to lowest, with expenditures very similar to those for Louisiana ($1.37 billion), Alabama ($1.32 billion), and Minnesota ($1.31 billion). For comparison, Oregon's expenditures were $781 million, Idaho's $227 million, and Montana's $175 million.[12]

B. Health Behaviors of Working Washingtonians

Chronic diseases can be avoided or, if a person already is affected, moderated and managed by addressing everyday *health behaviors*—that is, the things individuals do to protect, maintain, or promote their health.[15] Although health behaviors are within an individual's control, they also are deeply affected by the individual's social and economic environment, including the environment of the workplace.

Health behaviors can be usefully divided into *health-related lifestyles* and *use of clinical preventive services*. Health-related lifestyles include, for example, avoiding tobacco use, engaging in appropriate levels of physical activity, healthy eating, and maintaining a healthy body weight. Effective clinical preventive services include vaccination, smoking cessation treatment, and screening for cancer, high blood pressure, and high cholesterol, among other services.

B.1 Health-Related Lifestyles Among Working and Insured Washingtonians

Health-related lifestyles have a direct effect on a population's burden of disease, disability, and death. In 2000, the CDC reported that three chronic-disease-causing lifestyles—tobacco use, physical inactivity, and poor diet—were the three most common *actual causes of death* in the nation. *Actual causes of death* are health behaviors, such as smoking and physical inactivity, that directly contribute to leading causes of death, such as heart disease and cancer.[16] Tobacco use resulted in 18.1 percent of total U.S. deaths in 2000, and physical inactivity and unhealthy eating combined (and the related conditions of overweight and obesity) resulted in 15.2 percent.[17] Washington State's secretary of health, Mary Selecky, has observed that "When a death certificate is marked cancer or heart disease, the 'actual' cause of death is often tobacco use, lack of physical activity, poor nutrition, or alcohol abuse."[18]

Table 1 presents BRFSS data that illustrate that poor health-related lifestyles are common among working and insured Washingtonians; a discussion of each lifestyle follows.

Table 1. BRFSS Data on Selected Health-Related Lifestyles of Employed and Insured Washingtonians Age 18-64, 2001, 2002, or combined (as indicated)

	Year	Percent
Consumes fewer than 5 servings of fruits/vegetables a day	2002	78.3%
Does not meet recommended guidelines for physical activity	2001	44.3%
Current smoker	2001+2002	20.3%

Source: HPRC analysis of BRFSS data provided by the Washington State Department of Health, Sept. 2004.

Unhealthy Eating

The 2002 BRFSS reveals that 78.3 percent of employed, insured Washingtonians consumed fewer than five servings of fruits and vegetables a day. Research suggests that consuming fruits and vegetables can contribute to preventing some cancers, heart disease, stroke, chronic lower respiratory disease, and high blood pressure.[19] The *Food Guide Pyramid* and the *Dietary Guidelines for Americans*, published jointly by the U.S. Departments of Agriculture and Health and Human Services, recommend that Americans eat 2-4 servings of fruit and 3-5 servings of vegetables a day—for a combined total of 5-9 servings.[20]

Inadequate Physical Activity

The BRFSS indicates that in 2001, 44.3 percent of employed, insured adult Washingtonians did not meet recommended guidelines for physical activity. *The Health of Washington State*, a report on the health status of Washingtonians prepared by the Washington State Department of Health (DOH), reports that "regular physical activity reduces the risk of heart disease by improving blood cholesterol and blood pressure levels, controlling body weight, and helping to prevent and manage diabetes."[21]

Tobacco Product Use

For the years 2001 and 2002 combined, the BRFSS indicates that 20 percent of employed, insured Washingtonians was a smoker. According to *The Health of Washington State*, tobacco use and exposure are the most important risk factors for lung cancer; nationally, cigarette smoking is responsible for approximately 85 percent of lung cancer deaths. Cigarette smokers also are twice as likely to develop heart disease as non-smokers, and smoking is responsible for more than one of every five coronary heart disease deaths.[22] Other diseases directly related to smoking include high blood pressure; stroke; cervical, kidney, liver, and stomach cancer; and emphysema, among others.

B.2 Use of Clinical Preventive Services Among Working and Insured Washingtonians

Clinical preventive services are health care services aimed at 1) preventing disease entirely, or 2) screening to detect disease early when treatment will be most effective and least

expensive. Two national resources offer objective research and recommendations for clinical preventive services aimed at chronic disease prevention and detection:

- The U.S. Preventive Services Task Force (USPSTF): *Guide to Clinical Preventive Services*. The USPSTF is an independent panel of experts administered by the federal Agency for Healthcare Research and Quality. The panel systematically reviews evidence of the effectiveness of clinical preventive services and issues recommendations for their appropriate application in health care settings, particularly primary-care providers' offices.
- The Partnership for Prevention: Prevention Priorities: *Employers' Guide to the Highest Value Preventive Health Services.* The Partnership for Prevention is a not-for-profit organization that focuses on disease preventive and health promotion policies and practices of public and private-sector employers. Its *Prevention Priorities* reports on the Partnership's systematic review and ranking of 30 USPSTF-recommended clinical preventive services. The ranking is based on the health impact and cost effectiveness of the services.

The U.S. Preventive Services Task Force's *Guide to Clinical Preventive Services*

The USPSTF's *Guide to Clinical Preventive Services* is an evidence-based review of the effectiveness of over 100 clinical preventive services designed to prevent 60 illnesses and conditions. The *Guide* includes recommendations both for average-risk populations, by age and sex, and for specific high-risk populations such as pregnant women. Because the services for average-risk populations are most generally applicable and under-used, the following discussion is limited to these services.

Table 2 lists USPSTF recommendations for the provision of clinical preventive services specifically aimed at reducing chronic disease among average-risk, working-age adults.[23] Although influenza is not itself a chronic disease, the table includes influenza vaccination because influenza is a major cause of hospitalization and death among persons with heart disease.[24]

Table 2. U.S. Preventive Services Task Force Recommendations for Clinical Preventive Services for Chronic Disease Prevention Among Average-Risk, Working-Age Adults

Preventive Service	Age
Breast Cancer Screening	Adult women 40+ years
Cervical Cancer Screening	Adult women
Cholesterol Screening	Men 35+ years; Women 45+ years
Colorectal Cancer Screening	All adults 50+ years
High Blood Pressure Screening	Adults 18+ years
Influenza Vaccination (flu shot)	Adults 50+ years*
Obesity Screening	All adults
Tobacco Cessation Counseling and Medications	All adults

* The 1996 *Guide to Clinical Preventive Services* recommends influenza vaccination for adults age 65+. The USPSTF has not updated this recommendation, but the current version of the *Guide* directs the reader to the CDC's Advisory Committee on Immunization Practices for current recommendations. The ACIP recommends vaccination for all adults age 50+.
Source: U.S. Preventive Services Task Force. *Pocket Guide 2005.* www.ahrq.gov/clinic/pocketgd.htm.

The Partnership for Prevention's *Prevention Priorities*

Employers are the largest single source of health insurance in the U.S. (see Section IV, p. 41). Whether the health insurance benefits they offer their employees include clinical preventive services depends on the health insurance products they chose to purchase and the products available to them. It also depends on employers' knowledge about the types of health services they would like to include in their health insurance benefit.

To help employers most effectively purchase clinical preventive services in their health insurance benefit, the CDC contracted with the Partnership for Prevention, a national not-for-profit organization, to evaluate a subset of the clinical preventive services recommended in the USPSTF *Guide to Clinical Preventive Services*. The evaluation criteria were overall health impact and relative cost effectiveness.[†] The Partnership's *Prevention Priorities: Employers' Guide to the Highest Value Preventive Health Services* reports their evaluation scores for 30 USPSTF-recommended clinical preventive services that are, in practice, provided to the general population during a periodic health examination. Table 3 lists the highest-ranking *prevention priorities* specifically for working-age adults. On a scale of 2-10, each of these interventions received a score of 6 or better. They offer the most value to the employer and the employee for the dollar spent. Two among these, tobacco cessation treatment and influenza vaccination, are actually cost-saving.[25]

Table 3. Partnership for Prevention's *Prevention Priorities* for Average-Risk, Working-Age Adults: High-Impact, High-Value Clinical Preventive Services Targeted at Reducing Chronic Disease

Preventive Service	Age	Score (range = 2-10)
Tobacco Cessation Counseling + Medications	Adults	9
Cervical Cancer Screening	18+ years	8
Colorectal Cancer Screening	50+ years	8
High Blood Pressure Screening	Adults	8
Influenza Vaccination (flu shot)	50+ years*	8
Cholesterol Screening	Men 35+ years; Women 45+ years	7
Breast Cancer Screening	Women 40-69 years	6

* See note (*) under Table 2.
Source: Partnership for Prevention, Prevention Priorities: Employers' Guide to the Highest Value Preventive Health Services. www.prevent.org.

The Partnership also collaborated with Mercer Human Resource Consulting, Inc. on its *2001 National Survey of Employer-Sponsored Health Plans*, inserting questions about employer coverage of 14 of its highly ranked clinical preventive services for adults and children. The survey responses revealed that nationally, many employers are missing out on covering services proven to offer significant gains in employee health, restrained health care expenditures, and increased productivity. From the top high-impact, high-value services targeted at

[†] The measure for *health impact* was *clinically preventable burden*: the proportion of disease and injury prevented if the service was delivered in usual practice to 100% of the target population at recommended intervals.

reducing chronic diseases in working-age adults (see Table 3), the survey found that employer coverage of tobacco cessation counseling and medication, influenza vaccination, and colorectal cancer screening badly lags. For example, less than a third of all employers offers tobacco cessation services, and only one in ten offers tobacco cessation counseling and prescription medications—the most effective cessation service—in their primary health plan.[26]

BRFSS Data on Employed Washingtonians' Use of Select Clinical Preventive Services

Providing employees access to clinical preventive services targeted at chronic diseases does not guarantee they actually will use them. Data from the BRFSS reveal under-use of some clinical preventive services targeted at chronic diseases. Table 4 offers a list of services and their uptake among employed and insured Washingtonians; a discussion of each service follows.

Table 4. Under-Use of Clinical Preventive Services by Employed and Insured Washingtonians Age 18-64, BRFSS Data, 2001, 2002, or combined (as indicated)

	Year	Population	Percent Not Current
Influenza vaccination (flu shot) (12 months)	2002	Males & Females 18-64	72.3%
Colorectal cancer screening (5 yrs sigmoid-oscopy or colonoscopy; 2 yrs FOBT)	2001+ 2002	Males & Females 50-64	52.5%
Mammogram (2 years)	2002	Females 40-64	24.6%
Cholesterol Checked (5 years)	2001	Males 35-64; Females 45-64	17.9%
Pap test (3 years)	2002	Females 18-64	8.3%

Source: HPRC analysis of BRFSS data provided by the Washington State Department of Health, Sept. 2004.

Influenza Vaccination. The 2002 BRFSS indicates that 72.3 percent of employed, insured Washingtonians age 18-64 did not receive influenza vaccination that year. The CDC's Advisory Committee on Immunization Practices (ACIP) recommends annual influenza vaccination for all adults age 50 and above. In addition, the ACIP recommends aggressive targeting of the following groups of working-age adults, because influenza represents a high risk for them or those around them: all health care workers; any people with chronic heart or respiratory disorders, chronic metabolic diseases such as diabetes, or any condition that can compromise respiratory function; and all women who will be in the second or third trimester of pregnancy during the flu season.[27]

Colon Cancer Screening. BRFSS data for 2001 and 2002 combined indicate that 52.5 percent of employed, insured Washingtonians age 50-64 were not current with colorectal cancer screening—including sigmoidoscopy, colonoscopy, or a fecal occult blood test (FOBT). The USPSTF recommends a first colorectal screening examination at age 50 for women and men.

Mammography Screening. The 2002 BRFSS indicates that 24.6 percent of employed, insured female Washingtonians age 40-64 had not had a mammogram in the preceding two years.

The USPSTF recommends mammography every 1-2 years for preventive screening for breast cancer for women aged 40 and older.

Cholesterol Screening. The 2001 BRFSS indicates that 27.4 percent of all employed and insured Washington men age 35-64 and women 45-64 had not had their cholesterol checked in the past five years. The USPSTF recommends that men 35 and older and women 45 and older receive "routine" screens for total cholesterol and high-density lipoprotein cholesterol (HDL). The American College of Obstetricians and Gynecologists and the National Heart, Lung, and Blood Institute suggest screening every five years, depending on age.[28]

Cervical Cancer Screening. The 2002 BRFSS indicates that 8.3 percent of employed, insured Washington women age 18-64 had not had a Pap test within the prior three years. A Pap test is the primary screening test for cervical cancer, which in the three-year period 2000-2002 struck 7.1 out of every 100,000 Washington women. The USPSTF recommends screening at least every three years after the onset of sexual activity or age 21 (whichever comes first).

Data on Washingtonians' Use of Tobacco Cessation and High Blood Pressure Screening Services

Data are not readily available on use of tobacco cessation treatment services and high blood pressure screening by Washington adults, employed or otherwise. Some data sources offer indirect evidence of use of these important clinical preventive services:

Tobacco Cessation Treatment. The Washington State DOH reports that smoking among adult Washingtonians declined from 22.4 percent to 19.7 percent between 1999 and 2003.[29] In November 2000, the DOH introduced a toll-free Tobacco Quit Line that provides cessation counseling and information on medications, among other services. Through March 2004, the quit line had provided services to over 44,000 callers.[30] The USPSTF recommends that health care providers screen all adults for tobacco use and provide tobacco cessation interventions, including counseling and medication, for those who use tobacco products. But national HEDIS® data indicate that in 2003, 31.4 percent of smokers enrolled in commercial managed care plans did not receive advice from their health care provider to quit smoking, and 62.4 percent did not discuss smoking cessation medication with their provider.[31]

Screening for High Blood Pressure. BRFSS data indicate that the proportion of adult Washingtonians reporting having had a blood pressure screen in the prior two years declined overall between 1991 and 1999, from 95.4 percent to 93.3 percent.[32] The BRFSS survey has not posed a question about receipt of blood pressure screening since 1999. The USPSTF recommends routine high blood pressure screening for all adults age 18 and older. The Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure offers health care provider guidelines for screening methods and frequency.[33]

C. Socioeconomic, Racial, Ethnic, and Geographic Variation in Chronic Disease Among Adult Washingtonians

C.1 Socioeconomic, Racial, and Ethnic Variation in Chronic Disease

Many lenses can be used to study the health status of a population. For this initial broad overview of Washington State workers, we are most interested in health status by age and

gender. Other lenses for analysis could include socioeconomic factors such as income and education (among others), and demographic factors such as race and ethnic heritage. Each of these factors has been shown to have an association with mortality, incidence, and prevalence of certain chronic diseases. For example, low income and lack of education are associated nationally with higher heart disease mortality.[34] The incidence of invasive cervical cancer varies by race, with higher rates among Asian/Pacific Islanders and African Americans.[35] And the prevalence of diabetes varies by race and ethnic heritage, with American Indians/ Alaska Natives and Hispanic/Latino Americans having the highest and second-highest rates.[36]

Socioeconomic and demographic factors have an association with chronic disease in Washington State, as well. Very few data are readily available for mortality, incidence, and prevalence of cancer, heart disease, chronic lower respiratory disease, and diabetes for Washingtonians by income, education, race, and ethnicity. Tables 5 and 6 offer some key findings published in *The Health of Washington State*, for which DOH carefully analyzed BRFSS data over several years.

Table 5. Chronic Disease Mortality, Incidence, and Prevalence by Income and Education of Adult Washingtonians, years as indicated.

	Year(s)	As Income Decreases:	As Education Decreases:
Heart Disease	2000-2002	Mortality ↑*	Mortality ↑*
Colorectal Cancer	1999-2001	Incidence ↑*	Incidence ↑*
Asthma (a chronic lower respiratory disease)	1999-2000	Prevalence ↑	Prevalence ↑
Diabetes	1998-2000	Prevalence ↑	Prevalence ↑
	2000-2002	Mortality ↑*	Mortality ↑*
High Blood Pressure	1995/1997/1999	Prevalence ↑	Prevalence ↑
Cervical Cancer	1999-2001	Incidence ↑*	Incidence ↑*
Overweight and Obesity	1998-2000	Prevalence ↑ among women	Prevalence ↑
Stroke	2000-2002	No relationship found.	Mortality ↑*

* Rates with this symbol are *age adjusted*. See *The Health of Washington State, 2004 Supplement, Appendix A: Technical Notes.*

Source: WA State Dept. of Health. *The Health of Washington State, 2002 and 2004 Supplement.* www.doh.wa.gov/HWS/CD.shtm.

Although stroke is not one of the leading causes of death for Washingtonians younger than 65, it is included in Tables 5 and 6 because it is the third leading cause of death nationally and the mortality rate from stroke is higher in Washington State than the national average.[37] Tables 5 and 6 also offer information on the prevalence of overweight and obese adult Washingtonians.

Table 6. Chronic Disease Mortality, Incidence, and Prevalence by Race and Ethnicity of Adult Washingtonians, years as indicated.

	Year(s)	Racial and Ethnic Differences
Heart Disease	2000-2002	Higher mortality among African Americans, compared to Whites. Higher among non-Hispanics compared to Hispanics.*
Colorectal Cancer	1999-2001	Higher incidence among African Americans & Whites compared to Asians/Pacific Islanders.*
Asthma (a chronic lower respiratory disease)	1999-2000	No state data reported in this source.
Diabetes	1998-2000	No prevalence data reported in this source for these years.
	2000-2002	Lower mortality for Whites. Higher mortality for Hispanics compared to non-Hispanics.*
High Blood Pressure	1995/1997/1999	No statistically significant differences in prevalence by race or ethnicity.
Cervical Cancer	1999-2001	Higher incidence among Asians/Pacific Islanders. Higher incidence among Hispanics than non-Hispanics.*†
Overweight and Obesity	1998-2000	Higher prevalence among African Americans & American Indians compared to Whites.
Stroke	2000-2002	Higher mortality among African Americans & American Indians/Alaska Natives compared to Whites. Higher mortality among non-Hispanics.*

* Rates with this symbol are *age adjusted*. See *The Health of Washington State, 2004 Supplement, Appendix A: Technical Notes.*
Source: WA State Dept. of Health. *The Health of Washington State, 2002 and 2004 Supplement.* www.doh.wa.gov/HWS/CD.shtm.
† Rates for Asian/Pacific Islanders should be interpreted with caution, as they could be skewed by varying rates among the many subgroups that comprise this category. Reliable subgroup data are not available for Washington State. See source reference for additional explanation.

Socioeconomic and demographic factors also have an association with health behaviors. Table 7 offers key findings published in *The Health of Washington State* for three disease-causing risk behaviors: nutritional diet, physical activity, and tobacco use.

Table 7. Health-Related Lifestyles by Education, Income, Race, and Ethnicity of Adult Washingtonians, Using WA BRFSS, years as indicated

	Year	As Income Decreases…	As Education Decreases…	Racial and Ethnic Differences
Consuming fewer than 5 servings of fruits/vegetables daily	1996-1998-2000	No difference	Low consumption ↑	No difference
Physical Inactivity	1996-1998-2000	Inactivity ↑	Inactivity ↑	No difference
Tobacco Use	1998-2000	Prevalence ↑	Prevalence ↑	Highest prevalence among American Indians

Source: WA State Dept. of Health. *The Health of Washington State, 2002 and 2004 Supplement.* www.doh.wa.gov/HWS/CD.shtm

C.2 Geographic Variation in Chronic Disease

Researchers look at variation in the incidence of, and mortality from, chronic diseases across geographic regions primarily to determine whether populations in different areas have access to appropriate and timely health services. Geographic variation also can be examined to help design and target health promotion benefits and programs for particular people and populations.

Very little published research is available that looks at geographic variation in chronic diseases across the working-age population in Washington State. Three sources—*The Health of Washington State*, vital statistics reported by DOH, and the BRFSS—indicate that there is some difference in incidence and mortality rates for chronic diseases in areas of the state with higher rates of poverty, as well as in some rural and smaller municipal areas.

Geographic Variation by Poverty

According to *The Health of Washington State*, census tracts that have a higher proportion of the population living in poverty also have higher mortality rates for some chronic diseases, such as heart disease and diabetes. They also have a higher incidence of some chronic diseases, such as colorectal and cervical cancers.[38]

Geographic Variation by Urban, Large Town, or Small Town/Rural Designation

The Health of Washington State reports that some chronic disease mortality, incidence, and prevalence rates vary by whether the population under consideration is within an *urban core*, *large town*, or *small town/isolated rural* area of the state. The population size for each of these areas is:

- Urban Core Areas: 50,000 or more
- Large Town Areas: 10,000 to 49,999
- Small Town and Isolated Rural Areas: fewer than 10,000[†]

In the period 1998-2000, for example, the lung cancer mortality rate in large towns was 60.9 (per 100,000 people), significantly higher than the 56.9 rate for urban areas and 53.1 for small town/rural areas.[39] In the period 1997-1999, cervical cancer incidence in small towns/rural areas was 12.6 (per 100,000 women), significantly higher than the 7.7 in urban areas and 7.7 in large towns.[35]

Geographic Variation by County

In addition to reporting by urban, large town, and small town/rural areas, *The Health of Washington State* reports chronic disease mortality, incidence, and prevalence, and the prevalence of some health behaviors, by county. For example, in the period 1997-1999, diabetes-related hospitalizations were clustered in counties in the southwest region of the state, suggesting possibly higher prevalence rates in this area. (This could suggest, instead or in addition to prevalence, worse access to primary and preventive health care in this area.) In

[†] These definitions are based on the national RUCA (Rural Urban Commuting Area) classification system and also include commuting patterns. See www.doh.wa.gov/Data/Guidelines/RuralUrban.htm.

2001, seven of the eight counties with the highest smoking rates among adults, each above 25 percent, also were clustered in the west-southwest region of the state, including Pacific, Cowlitz, Mason, Lewis, Grays Harbor, and Pierce counties (Douglas County was the exception).[40] Three of these counties—Pacific, Mason, and Grays Harbor—had the highest rates of lung cancer mortality that year (89.9 or more per 100,000 people).[41]

Summary and Implications for Employment-Based Prevention of Chronic Disease

Chronic diseases are an important issue for employers. Four such diseases account for over half of all deaths among Washingtonians age 20-64: they are cancer, heart disease, chronic lower respiratory disease, and diabetes. As age increases, more new cases of chronic disease arise, greater proportions of the population are affected, and more deaths occur from chronic disease. The rates of disease incidence, prevalence, and mortality are particularly high for Washington adults age 45-64, a group that accounts for 36 percent of all employees in the state.

Many, but certainly not all, chronic diseases could be delayed, prevented, or managed through adopting healthy lifestyles—in particular engaging in adequate physical activity and healthy eating, maintaining a healthy body weight, and avoiding tobacco use. BRFSS data suggest that the incidence and prevalence of chronic diseases, and their effects on the health of Washington workers, could be substantially reduced if workers adopted healthier behaviors. The data reveal, for example, that 78 percent of working and insured Washingtonians do not consume recommended amounts of fruits and vegetables daily, 44 percent do not meet recommended guidelines for physical activity, 59 percent are overweight or obese, and 20 percent are current smokers. The data also illustrate that this low engagement in healthy lifestyles begins at a young age: for example, 40 percent of Washingtonians age 18-24 are already overweight or obese—a proportion that rises to 65 percent for those age 45-54.

Clinical preventive services help in preventing disease entirely via counseling, preventive medication, and vaccination, and through detecting disease early via screening. Eight clinical preventive services are recommended for prevention of chronic diseases among working-age adults at average risk: influenza vaccination; tobacco use treatment; and screening for high blood pressure, high cholesterol, overweight/obesity, and colorectal, breast, and cervical cancers. Unfortunately, available data indicate there are large gaps in the use of these services by Washington workers. For example, 72.3 percent of insured Washington workers do not get an annual influenza vaccination. Fifty-three percent (52.5) of those age 50-64 are not current in their screening for colorectal cancer, the second leading cancer killer for all adult Washingtonians. And 24.6 percent of insured female workers age 40-64 do not get recommended mammography screening for breast cancer, the second leading cancer killer for adult Washington women.

Combined with substantial mortality, incidence, and prevalence rates for chronic disease among all Washington adults, these measures of healthy lifestyles and use of clinical preventive services among working adults paint a picture of an employed population that could benefit from health promotion information and support. If employees gain in health status from healthier lifestyles and use of clinical preventive services, employers, too, will gain from decreased health care cost expenditures and improvement in other health-related

costs, such as worker productivity. In particular, employees and employers alike would benefit from increased numbers of employees receiving influenza vaccination and using tobacco cessation treatment, as these two clinical preventive services have been shown to be cost saving to employers.

To be most effective, health promotion activities must be appropriate for the workforce at hand. Employer health promotion assistance needs to incorporate a careful examination of the workforce by several characteristics, among them income, education, race, and ethnicity. Poor and less-educated Washingtonians are at highest risk for chronic diseases and the health-related lifestyles that cause or contribute to them, as are some racial and ethnic minorities, particularly African Americans. Available, if limited, data indicate that the mortality, incidence, and prevalence rates of virtually all chronic diseases increase with decreasing income and education. Likewise, tobacco use, physical inactivity, and low consumption of fruits and vegetables rise with decreasing income, education, or both. Although data are not available, we would expect to see similar relationships among employed Washingtonians, as well.

~ • ~

II. Employees and Employment in Washington State

To most effectively and efficiently offer assistance to Washington State employers in providing health promotion benefits, policies, and programs to their employees requires a basic understanding of the state's workforce: How many working-age Washingtonians are employed? Are there variations in employment by county or region? What proportion is employed full-time or part-time, in temporary or permanent positions? What are the demographic characteristics of the employed, such as age, race, and ethnic heritage?

A. Statewide Employment Trends

Data that describe employment trends and patterns paint a broad picture of working-age Washingtonians who, along with their families and other dependents, could be offered employment-based chronic disease preventive care interventions—such as clinical preventive services—and other health promotion messages and assistance.

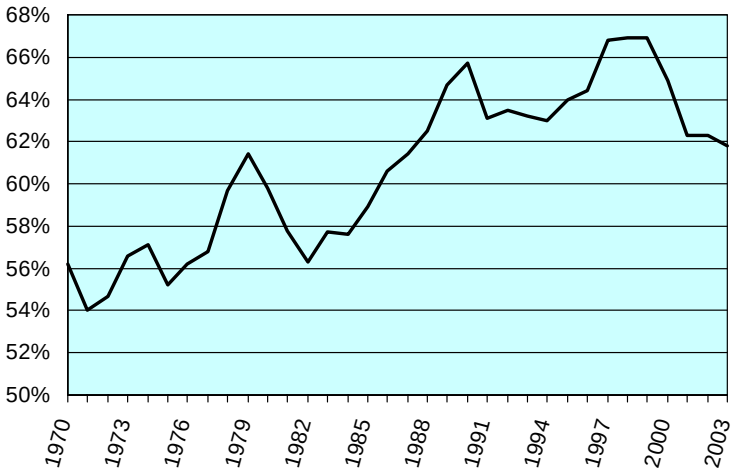
Employment among civilian working-age Washingtonians—defined as age 16 and older—has risen since 1970 (Figure 3). The rise has not been steady, however: there were some striking dips during economic recessions, particularly in 1979-1982 and more recently beginning in 1999. Annual average employment was at 66.9 percent in 1999, a 30-year high. But that year the upward trend quickly shifted into a steep decline, hitting bottom at 61.8 percent in 2003.

Unemployment data also offer a perspective on the proportion of the working-age population that carries the same potential chronic disease burden as the employed but that is not as readily reached via employment-based health insurance and health promotion messages. Without access to the health insurance that employment might offer, health outcomes and health status for the unemployed can be worse than for their employed and insured peers. Their consequent health care costs are borne not just by them, but by all other sectors of the health care marketplace, including the insured (for example, employers and employees, people with individual health insurance policies, and others with insurance

Employment Fast Facts

- In 2004, there were 3.2 million Washingtonians in the civilian labor force, with an annual unemployment rate of 6.2 percent. Many rural counties had unemployment rates lower than both their rural and urban counterparts.
- In 1998, 79 percent of working Washingtonians were employed in full-time jobs, 21 percent in part-time jobs. Eighteen percent of all jobs were temporary.
- Data from the 2000 census indicate that 84 percent of the state's labor force is White. Asians account for 5.4 percent, African-Americans for 2.9 percent. People of Hispanic ethnicity, who can be of any race, make up 6.4 percent. By 2030, non-White Washingtonians will increase from 16.4 to 21.3 percent of the labor force
- Women comprise 46.3 percent of Washington's labor force. Their proportion will continue to grow over the next 25 years, although quite slowly.
- The number of Washington workers age 55 and older will grow by 98 percent by 2030, when they will comprise over one in five workers.

Figure 3. Employment Among Civilian, Working Age Washingtonians, 1970-2003



Source: Calculated from data in US Bureau of Labor Statistics, "Labor force data for states and selected areas, 1970 - 2003 annual averages." www.bls.gov/lau/staadata.txt, extracted April 21, 2004.

in the private sector) through higher insurance premiums; providers through uncompensated and charity care; and the state through public health insurance programs.

The state's unemployment rate generally mirrors the rise and fall in employment levels. As employment has experienced a modest recovery since 2003, the statewide unemployment rate has dropped: from 7.5 percent in 2003 to 5.8 percent by December 2004—near the national average of 5.4 percent.

B. Local Employment Patterns

Understanding local employment patterns and trends is important in determining whether health promotion assistance is best targeted by geographic region or by industry. In 2004, the distribution of employed Washingtonians across counties largely mirrored the distribution of the population as a whole: that is, counties with smaller populations generally accounted for a smaller proportion of all employed Washingtonians, and counties with larger populations accounted for higher proportions (Table 8). Adams County, for example, had 0.3 percent of the state's total population and 0.3 percent of all employed. Snohomish County had 10.5 percent of the state's total population and 10.5 percent of the employed.

The unemployment rate across counties tells a different story. Several rural counties, such as Ferry and Cowlitz, had much higher unemployment rates in 2004 (10.6 and 8.5, respectively) than did more urban counties, such as King (5.1) and Spokane (6.5). At the same time, other rural counties had unemployment rates lower than both their rural and urban counterparts. This lack of consistency in the difference between rural and urban counties suggests that when determining how to target employer health promotion assistance, it would be more effective to examine the types of employment available (or in decline) in counties or regions than to rely solely on a county's rural or urban designation.

Table 8. 2004 Washington State Annual Average Employment and Unemployment by County

County	Percent of State Employment	2004 Unemployment Rate	County	Percent of State Employment	2004 Unemployment Rate
Adams	0.3	7.9	Lewis	0.9	8.3
Asotin	0.3	6.6	Lincoln	0.2	6.5
Benton	2.7	5.9	Mason	0.7	7.4
Chelan	1.2	6.9	Okanogan	0.7	7.8
Clallam	0.9	6.9	Pacific	0.3	7.7
Clark	5.9	7.5	Pend Oreille	0.2	8.8
Columbia	0.1	8.3	Pierce	11.3	7.1
Cowlitz	1.3	8.5	San Juan	0.3	4.5
Douglas	0.6	6.3	Skagit	1.7	6.9
Ferry	0.1	10.6	Skamania	0.1	8.7
Franklin	0.8	7.6	Snohomish	10.5	5.6
Garfield	0.0	5.2	Spokane	6.9	6.5
Grant	1.2	8.1	Stevens	0.6	8.3
Grays Harbor	0.9	8.3	Thurston	3.8	5.7
Island	1.0	6.7	Wahkiakum	0.1	7.6
Jefferson	0.4	5.9	Walla Walla	0.9	6.1
King	31.1	5.1	Whatcom	3.1	5.7
Kitsap	3.8	5.9	Whitman	0.6	4.4
Kittitas	0.6	6.5	Yakima	3.6	8.6
Klickitat	0.3	9.2	State Total	100.0	6.2

Source: WA State Dept. of Employment Security, Labor Market and Economic Analysis Branch. Labor Force, Employment, Unemployment, and Unemployment Rates (LAUS) Labor Force Statistics on-line database: www.workforceexplorer.com/cgi/dataanalysis/AreaSelection.asp?tableName=Labforce

C. Full-Time, Part-Time, and Temporary Work Status

Part-time and temporary employment can affect whether an employee has access to a variety of employer-sponsored benefits and programs. The most recent year for which data are available on full-time, part-time, and temporary employment in Washington State is 1998; the data are summarized below and in Table 9:

- Full-Time Employment: Nearly three quarters (70.5 percent) of employed Washingtonians worked in full-time, non-temporary jobs in 1998. Another 8.2 percent worked in full-time, temporary jobs.
- Part-Time Employment: One in five employees (21.3 percent) worked part time, defined as 35 or fewer hours per week. Nearly 12 percent of all employees worked in non-temporary jobs, and nearly 10 percent in temporary jobs.
- Temporary workers, both full- and part-time, made up 17.8 percent of all employed Washingtonians—very nearly one in five employees.

The 1998 data are from a period when employment was high and still rising in Washington State. Because the proportion of the workforce holding part-time or temporary jobs is affected by economic and market conditions, these proportions might be much different six years later in the slower-growth economy of 2004-2005.

Table 9. Profile of the Washington State Labor Force by Temporary and Part-Time Status, 1998

	Not-Temporary	*Percent of All Employed*	Temporary	*Percent of All Employed*	Total Employed	*Percent of All Employed*
Employed Full-Time	1,962,000	70.5%	228,000	8.2%	2,190,000	78.7%
Employed Part-Time	326,000	11.7%	266,000	9.6%	592,000	21.3%
Total:	2,288,000	82.2%	494,000	17.8%	2,782,000	100.0%

Source: Ta-Win Lin, *Temporary and Part-time Workers in Washington State*, WA State Office of Financial Management, Research Brief No. 4, June 1999. www.ofm.wa.gov/researchbriefs/brief004.pdf.

D. Age Make-Up of the Labor Force

In 2003, 36 percent of Washington's civilian labor force—1.12 million people—were between the ages of 45 and 64 (Table 10). This age group made up a similar proportion of the employed population, a subset of the labor force. Washingtonians younger and older than the 45-64 year-olds accounted for about 62 percent and 3 percent, respectively, of both the labor force and the employed population.

Table 10. Profile of the Washington State Labor Force by Age, 2003

Age (Years)	Civilian Labor Force	Percent of Total Labor Force	Employed	Percent of all Employed	Un-employed	Percent of all Un-employed	Un-employment Rate
All age 16+	3,140,000	100.0%	2,903,000	100.0%	237,000	100.0%	7.5%
16 to 19	173,000	5.5%	135,000	4.7%	37,000	15.6%	21.4%
20 to 24	337,000	10.7%	300,000	10.3%	36,000	15.2%	10.7%
25 to 34	669,000	21.3%	628,000	21.6%	41,000	17.3%	6.1%
35 to 44	768,000	24.5%	709,000	24.4%	59,000	24.9%	7.7%
45 to 54	736,000	23.4%	699,000	24.1%	37,000	15.6%	5.0%
55 to 64	380,000	12.1%	358,000	12.3%	22,000	9.3%	5.8%
65+	77,000	2.5%	73,000	2.5%	4,000	1.7%	5.2%

Source: US Dept. of Labor, Geographic Profile of Employment and Unemployment Part II, Estimates for States, 2002, www.bls.gov/lau/table12full02.pdf. Data from Current Population Survey.

Over the next 25 years the state's overall labor force is expected to grow, though fairly slowly: about 1.4 percent a year until 2010 and 0.9 percent each year thereafter. The slowdown after 2010 is a national phenomenon related to the aging of the baby boom generation, which begins to enter retirement age—currently considered to be 65—that year.[42]

Projected changes in the number of Washingtonians in various age groups and their anticipated rates of participation in the labor force will alter the look of the labor force

overall. This has ramifications for employer-sponsored benefit programs of any kind. Growth in the number of Washingtonians age 25-54, for example, is expected to slow to 0.6 percent annually, a marked change from 2.9 percent in the 1980s and 2.1 percent in the 1990s. By 2030 people age 35-54 will comprise 44 percent of the labor force, down from just under 49 percent in 2003. At the same time, the number of labor force participants over age 55 is expected to increase by 98 percent overall. They will hold a 22 percent share by 2030, much higher than the 15 percent they held in 2003. Growth in the labor force among those age 65-70, in particular, will be fueled by economic need, longer life expectancy, and high educational attainment.[42]

E. Racial, Ethnic, and Gender Make-up of the Labor Force

E.1 Race and Ethnicity

The U.S. Census indicates that in 2000, 83.6 percent of the Washington labor force was White (Table 11). Asians were the largest minority race at 5.4 percent. People of Hispanic ethnicity, who can be of any race, made up 6.4 percent.

Some racial and ethnic groups had higher rates of unemployment that year than others. Unemployment was highest among American Indian/Native Alaskans (14.7 percent) and people of Hispanic/Latino heritage (12.5 percent) and lowest among Whites (5.6 percent) and Asians (5.8 percent). Some groups' share of the total labor force was quite different from their share of the unemployed population, indicating that they were over-represented among the unemployed.

Participation in the labor force by Asians, African-Americans, and other racial and ethnic groups is projected to rise at a 2.0 percent annual rate over the next 25 years. By 2010, non-white Washingtonians will comprise 19.1 percent of the labor force and by 2030 their share will increase to 21.3—a substantial increase over the 16.4 share they represented in 2003.[42]

E.2 Gender

In 2000, 53.7 percent of the state's labor force was male. Unemployment for men was at 6.4 percent, slightly higher than the 6.1 percent for women (see Table 11). The number of men in Washington's labor force has declined somewhat since the early 1980s, particularly the among men age 55-64. Over this same period (and starting a decade earlier) the number of women rose. This trend will continue over the next 25 years, though its pace will slow. By 2030, men will comprise 53.3 percent of the labor force, women 46.7. [42]

The steady increase in the proportion of women in the labor force has had, and will continue to have, ramifications for employer-sponsored benefits and programs. The Washington State Office of Financial Management predicts that continued growth in the female workforce will motivate employers to provide programs that specifically accommodate the needs of female workers, such as on-site child care and flexible work schedules.[42]

Table 11. Profile of the Washington State Labor Force by Race, Ethnicity, and Gender, 2000

	Civilian Labor Force	Percent of Total Labor Force	Employed	Percent of Employed	Unemployed	Percent of Unemployed	Unemployment Rate by Race
Total Civilian Labor Force	2,979,824	100.0%	2,793,722	100.0%	186,102	100.0%	6.2%
Race:							
White alone	2,492,065	83.6%	2,352,311	84.2%	139,754	75.1%	5.6%
Asian alone	160,796	5.4%	151,518	5.4%	9,278	5.0%	5.8%
Black/African-American alone	85,050	2.9%	76,415	2.7%	8,635	4.6%	10.2%
American Indian/Native-Alaskan alone	40,422	1.4%	34,475	1.2%	5,947	3.2%	14.7%
Hawaiian/Other Pacific Islander	10,548	0.4%	9,454	0.3%	1,094	0.6%	10.4%
Other race alone	100,445	3.4%	86,896	3.1%	13,549	7.3%	13.5%
Two or more races	90,498	3.0%	82,653	3.0%	7,845	4.2%	8.7%
Ethnicity:							
Hispanic/Latino (any race)	189,754	6.4%	166,045	5.9%	23,709	12.7%	12.5%
Gender:							
Male Total	1,601,612	53.7%	1,499,629	53.7%	101,983	54.8%	6.4%
Female Total	1,378,212	46.3%	1,294,093	46.3%	84,119	45.2%	6.1%

Source: WA State Employment Security Dept., Affirmative Action Planning Data, Resident Labor Force, Employment & Unemployment by Sex and Minority Status, www.workforceexplorer.com/publication.asp?PUBLICATIONID=731, Accessed April 21, 2004. Data from Census 2000.

Summary and Implications for Employment-Based Prevention of Chronic Disease

The profile of employment in Washington State suggests that employment-based health promotion efforts should focus on both full-time and part-time employees. Fairly old data from 1998 indicate that over three quarters of employed Washingtonians worked in a full-time job that year, and one in five worked in part-time jobs. Although national and local research has shown that full-time employees have a higher probability of being offered employer-sponsored health benefits than do part-time employees, the high proportion of workers in both types of employment in Washington State suggest that all would make good targets for health promotion efforts. Health insurance offer rates to full and part-time employees in Washington State, and to employees by other characteristics, are examined in Section IV, *Employment-Based Health Insurance in Washington State*.

The profile of Washington State employment also suggests targeting industries, as opposed to defined rural regions, for health promotion assistance. Employment and unemployment data by county suggest that it would be most effective to examine the types of employment available, or in decline, in counties or regions than to rely on a county's rural or urban designation. Trends in industry growth and decline in the state are examined in Section III, *Employers in Washington State*.

The profile also suggests ensuring that employment-based health promotion efforts meet the needs of employees age 45 and older, in particular—or even 35 and older—and that they reflect the demographic makeup of the workforce at hand. Well over a third of working Washingtonians are age 45-64 and another quarter are age 35-44. Growth in the number of Washington workers younger than 54 will slow over the next 25 years, while the number age 55 and older will grow by 98 percent. Tomorrow's older workers are today's younger, and by 2030 they will comprise over one in five workers. The state's labor force today also is predominantly White, but its age, racial, and ethnic makeup is transforming: by 2030 the proportion of Whites will steadily decline as the proportion of Asians, African Americans, and other racial and ethnic groups rises. Research has shown that older workers have different health care outcomes on a population basis than younger workers, and that workers in minority populations have different outcomes from each other and from Washington State's majority White population. These outcomes can and do affect health care costs. They are examined in Section I, *Health Status and Health Behaviors of Employed Washingtonians*.

~ • ~

III. Employers in Washington State

To effectively target employers for assistance in implementing health promotion benefits, policies, and programs requires good knowledge of what the state's employer community looks like: What types of industries are located in Washington? What is the range of firm sizes? What is the wage structure like? What are the trends in industry growth or decline?

A. Industries

Washington's economy has continually restructured over the past century. In the west, employment and industrial output shifted from natural resource industries, such as timber and fishing, to manufacturing, especially aerospace. In central and eastern Washington, agriculture was, and continues to be, the dominant industry—including, for example, orchard fruits, field crops, and livestock. In the early-to-mid 1900s, Federal works projects and war-related industries also provided employment statewide.

By 1960, almost half of the state's employment was in the manufacturing and government sectors. More recently, employment in the information sector, particularly in high technology industries, has begun to outpace employment in traditional manufacturing. The service sector—such as professional and business services—also has seen recent strong employment growth, reflecting a nationwide rise in consumption of services. By 2003, manufacturing and government accounted for less than a third of Washington State employment. And by 2029—24 years from now—the information and service sectors are projected to comprise 45 percent of employment statewide.[43]

A.1 Agricultural Industries

Industrial data collected at the federal and state level identify industries as being agricultural or non-agricultural. In 2003, agricultural industries accounted for 79,500 jobs in Washington State, or about 3 percent of all jobs. In the past 15 years, agricultural employment has remained steady but jobs have shifted away from forestry, logging, and crop production toward agricultural and forestry support services, such as fruit sorting, grading, and packing. Nearly 90 percent of agricultural jobs in

Employer Fast Facts

- In 2003 there were 2.7 million non-agricultural jobs in Washington State and 79,500 agricultural jobs.
- Government is the largest employer in the state, accounting for one in five non-agricultural jobs. Other top employment sectors include retail trade, professional and business services, health services and social assistance, and manufacturing.
- Eighty-four percent of the employers in Washington State have 50 or fewer employees. They account for 41 percent of employment statewide.
- Employers with 1,000+ employees comprise 0.1 percent of all firms but account for 17% of all employees. Employers with 250 or more employees comprise only 0.5 percent of all the state's firms but account for 32 percent of employment statewide.
- The average annual wage in 2003 was $39,021. The leisure and hospitality industry had the lowest average at just over $15,700. The information industry had the highest at just over $104,000.
- Some industries in Washington State are in decline, particularly manufacturing (excluding aerospace). Others are on the upswing—among them education and health services, retail trade, and professional, scientific, and business services.

2003 were in industries other than forestry and logging, and 83 percent of these jobs were in Eastern Washington—where they accounted for one out of every ten jobs of any kind.

The agricultural sector exerts an influence on employment in jobs that are indirectly related to agriculture but are not classified as such—such as food processing, distribution, and retailing. The Washington State Employment Security Department estimates that the combination of agricultural jobs (excluding forestry and logging) and jobs indirectly related to agriculture accounted for about 21 percent of all jobs in Washington State in 2003.[44]

A.2 Non-Agricultural Industries

Government—including federal, state, and local government services and public secondary and post-secondary education—was the largest non-agricultural employment sector in 2003, accounting for one in five jobs statewide (Table 12). Other non-agricultural industries that were important that year, each accounting for an additional 10 percent or more in employment, were retail trade, professional and business services, health services/social assistance, and manufacturing.

Table 12. Washington State Non-Agricultural Employment by Industry Sector, 2003*

	Employees		Percent Distribution
Government Total	526,900		19.5%
- Federal	=	70,100	
- State	=	147,900	
- Local	=	308,900	
Retail Trade	313,200		11.6%
Professional and Business Services	301,900		11.1%
Health Services and Social Assistance Total	276,300		10.2%
- Ambulatory Health Care Services	=	113,300	
- Hospitals	=	63,000	
- Nursing and Residential Care Facilities	=	53,500	
- Social Assistance	=	46,500	
Manufacturing	260,900		9.6%
Leisure and Hospitality	250,600		9.3%
Construction	164,300		6.1%
Financial Activities	157,200		5.8%
Wholesale Trade	117,700		4.3%
Other Services	101,200		3.7%
Information	96,400		3.6%
Transportation, Warehousing and Utilities	91,400		3.4%
Education Services	42,300		1.6%
Natural Resources and Mining	8,500		0.3%
Total Nonagriculture	2,708,800		100.0%

* The federal Bureau of Labor Statistics, the original source for these data, excludes several job types from its non-agricultural employment data (besides those classified as being agricultural), including the self-employed, workers in private households, proprietors, and members of the armed services.

Source: WA State Dept. of Employment Security, Labor Market and Economic Analysis Branch, Nonagricultural Wage and Salary Workers Employed in Washington State, 2004 (Preliminary). www.workforceexplorer.com/cgi/dataanalysis/?PAGEID=94 (see "employment series" link).

A.3 Seasonal Industries

Washington State has a high percentage of seasonal workers in agriculture and construction. About 80 percent of all agricultural employment is classified as "very highly seasonal."[45] In 2004, amusement parks and arcades, RV parks and recreational camps, spectator sports, and scenic and sightseeing transportation firms also had relatively high seasonal employment.[46]

B. Firms

B.1 Firm Size

The size of a firm is defined by the number of workers it employs. For research purposes, firms are often categorized as being small, medium, or large, though the definition of each category varies widely by researcher and data source. For this study, we use a more commonly used definition: small employers are those with 1-249 employees, medium 250-999, and large 1,000 or more.

Data on firm size from the Washington State Employment Security Department do not fit into the small, medium, and large categories as they are defined for this study. These data indicate, for example, that in early 2004 firms in Washington State with from one to four employees comprised over half (52.6 percent) of all the state's firms, but employed only 7.5 percent of all workers (Table 13). Firms with fewer than 50 employees accounted for 84 percent of all firms and 41 percent of all employees.

Relatively few firms in Washington State have 50 or more employees. Firms with 50-249 employees, for example, accounted for only 3.5 percent of all firms in 2004—but for 26.6

Table 13. Number of Firms in Washington State by Firm Size and Total Persons Employed in Each Size Category, 1st Quarter 2004

Firm Size (Based on Number of Employees)	Number of Firms	Percent of all Firms	Number of Employees	Percent of all Employees
0	25,110	12.2%	---	0.0%
1-4	108,552	52.6%	198,127	7.5%
5-9	31,370	15.2%	207,138	7.9%
10-19	19,869	9.6%	267,977	10.2%
20-49	13,422	6.5%	404,548	15.4%
50-99	4,454	2.2%	308,539	11.7%
100-249	2,632	1.3%	393,129	14.9%
250-499	677	0.3%	228,914	8.7%
500-999	256	0.1%	171,945	6.5%
1,000+	189	0.1%	453,313	17.2%
Total	206,531	100.0%	2,633,630	100.0%

Source: WA State Employment Security Dept., Size of Firm Data, September 2004, www.workforceexplorer.com/cgi/dataanalysis/?PAGEID=94 (see "Miscellaneous" link).

percent of all employees. Firms with 1,000 or more employees—*large* firms by our definition—comprised only 0.1 percent of all firms in the state but 17.2 percent of all employees. Among these very large firms, those with headquarters in the state include Microsoft Corp., Costco Wholesale Corp., Weyerhaeuser Co., Washington Mutual, and Safeco Corp., among many others.

B.2 Geographic Distribution of Firms

The Washington State Employment Security Department estimates that in 2002, 54 percent of all firms were located in the greater Puget Sound region, including Snohomish, King, and Pierce counties. Twenty-three percent of all firms were located east of the Cascade Range.[47]

C. Wages by Industry Sector, Firm Size, and Region

C.1 Wages by Industry Sector

Average annual wages vary substantially across industries in Washington State, a consequence of several factors such as industry type, firm size, and presence of unions (Table 14[†]). In 2003, the average annual wage for all industries was $39,021. The leisure and hospitality

Table 14. Employer Units and Wages by Industry in Washington State, 2003

Major Industry Division	Number of Employer Units	Percent of all Units	Employees	Percent of all Employees	Average Annual Wage
Government, Public Education	2,023	1.0%	495,281	18.7%	$40,546
Trade, Transportation, Utilities	32,178	15.3%	492,936	18.6%	$33,788
Education and Health Services	14,861	7.1%	292,553	11.0%	$32,907
Professional and Business Services	24,604	11.7%	281,372	10.6%	$48,333
Manufacturing	7,437	3.5%	262,211	9.9%	$50,546
Leisure and Hospitality	13,835	6.6%	244,299	9.2%	$15,730
Financial Services	11,801	5.6%	148,492	5.6%	$48,964
Construction	22,991	11.0%	143,768	5.4%	$39,468
Information†	2,379	1.1%	91,108	3.4%	$104,042
Natural Resources, Agriculture, Forestry, Fishing, Mining	9,091	4.3%	81,883	3.1%	$21,197
Other Services	10,559	5.0%	73,724	2.8%	$25,692
Total of All Industries (not just those above)*	209,682		2,653,776		$39,021

*Data in this table exclude industry codes for private households that employ domestic services, such as cooks, maids, gardeners, and babysitters. Consequently, columns will not add up to "Total of All Industries."[48]

†This category includes software publishers; non-Internet broadcasting; wired and wireless telecommunications carriers; and newspaper, book, and directory publishers, which helps explain the high average annual salary.

Source: WA State Employment Security Dept., *Washington Labor and Economic Annual Report, 2004, "2004 Washington State Labor Market Fast Facts."* www.workforceexplorer.com/article.asp?ARTICLEID=3954&PAGEID=&SUBID=. *NOTE: Table in published version is incorrect: data reported here are from a revised table provided to the authors by J. Wines at the ESD.*

[†] Please note that the data sources and their collection periods are different for Tables 12 and 14, and industries are grouped differently. Consequently, the number of employees in various categories are similar, but do not match.

industry had the lowest average at $15,730 and the information industry had the highest at $104,042.[46]

The most recent year for which data are available on the median *hourly* wage, by industry, is 2002. That year, the median was $16.95. Limited-service eating places—such as fast-food outlets and coffee shops—had the lowest median at $7.53 per hour. Other industries with a median wage below $9.00 included child day care services, agriculture and forestry support activities, and gasoline stations. Software publishers had the highest median wage at $38.06. Other industries with a median above $31.00 per hour were aerospace product and parts manufacturing, Internet publishing and broadcasting, and computer systems design and related services.[49] For comparison, Washington's minimum wage in 2002 was $6.90 per hour (the highest in the nation).

C.2 Wages by Firm Size

For the most part, as firm size increases in Washington so does the overall wage scale (Table 15). In 2002, for example, the median hourly wage for the smallest firms (0-19 employees) was 71 percent of the median for the largest (1,000 or more). But the difference between small and large firms at the low end of their wage scales was not nearly as substantial as it was at the top end. For example, the lowest average wage for the smallest firms was 90 percent of the lowest average wage for the largest ($6.63 and $7.41, respectively). This suggests that low-paid workers can be found in any firm, regardless of size. The same relationship did not hold at the top end of the wage scale, where on average the smallest firms offered 60 percent of what the largest firms offered.

C.3 Wages by Region

Industries differ across counties and across regions of Washington State, and wages reflect these differences. Industries in the rural western parts of the state, for example, differ from those in rural central and eastern Washington. Similarly, different metropolitan areas, such

Table 15. Median Wage by Firm Size in Washington State, 2002

Firm Size by Average No. of Employees	Number of Firms	Percent of all Firms	Number of Employ-ees	Percent of all Employ-ees	Median Wage	Bottom 10% of Average Wages	Top 10% of Average Wages
0-19	208,935	90.8%	661,139	25.3%	$13.85	$6.63	$55.99
20-49	13,153	5.7%	394,474	15.1%	$14.66	$6.80	$57.64
50-99	4,442	1.9%	308,084	11.8%	$15.27	$6.92	$60.75
100-249	2,585	1.1%	387,734	14.9%	$15.78	$6.94	$63.75
250-499	671	0.3%	230,289	8.8%	$16.24	$7.06	$63.68
500-999	246	0.1%	168,607	6.5%	$16.38	$6.94	$64.89
1,000+	188	0.1%	458,586	17.6%	$19.51	$7.41	$92.51
Total	230,220		2,608,913				

Source: WA State Employment Security Dept., *Washington Wage Report 1990-2002*, Feb. 2004. www.workforceexplorer.com.

as parts of Clark, Whatcom, and Yakima counties, have different types of industries. Although most counties contain a mix of rural and other areas, and hence a mix of industry types, median wages are calculated by county, not by sub-region. In 2002 and 2003, King, Snohomish, Benton, and Thurston counties had the highest median hourly wages, each with medians above the $16.95 statewide median. Counties with the lowest medians included Yakima, Grant, Adams, Okanogan, and Columbia, all with medians below $12.00.[49] These five counties were among those with the highest unemployment rates in 2004 (see Table 8, p. 27).

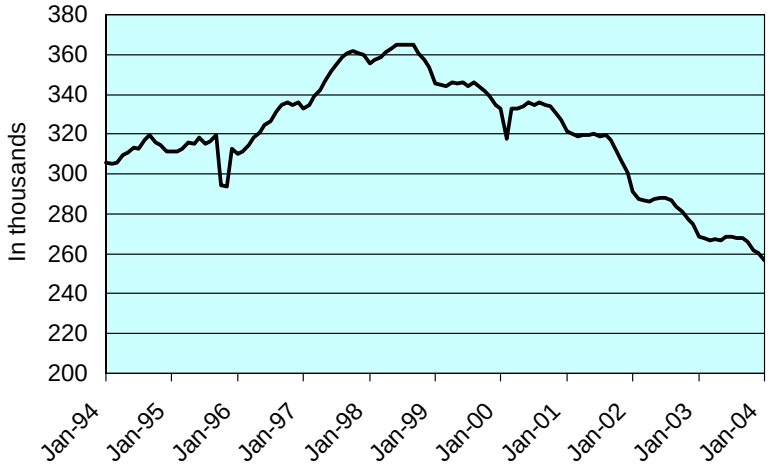
D. Ongoing and Expected Changes in Washington's Industries

Employment by industry sector changes over time, so in designing any service program for employers it is important to be aware of employment trends. Manufacturing jobs in Washington, excluding aerospace, have suffered the largest loss of any industry sector in the state over the past decade (Figure 4). Employment declined by 26 percent between 1998 and 2004, from a high of over 360,000 to below 260,000. Even with aerospace added back in, the trend has been continuously downward: declining from well over 30 percent of total employment in Washington in the 1960s to 11 percent in 2002.[50] This mirrors the national experience, where manufacturing jobs also peaked in early 1998 and have since been steadily declining.[51]

The manufacturing sector is experiencing a *structural* decline, as opposed to sectors that lose or gain jobs *cyclically*, such as real estate, retail trade, and construction. Structural decline is associated with permanent changes in demand and supply. The natural resource and agriculture, federal government, and utilities sectors also experienced structural decline between 1990 and 2002.[46, 50]

Industry sectors that are experiencing a structural increase include information; professional and technical services; administrative and waste management services; other services; and arts, entertainment, and recreation. Among the sectors that added jobs between September

Figure 4. Manufacturing Employment in Washington State, 1994-2004

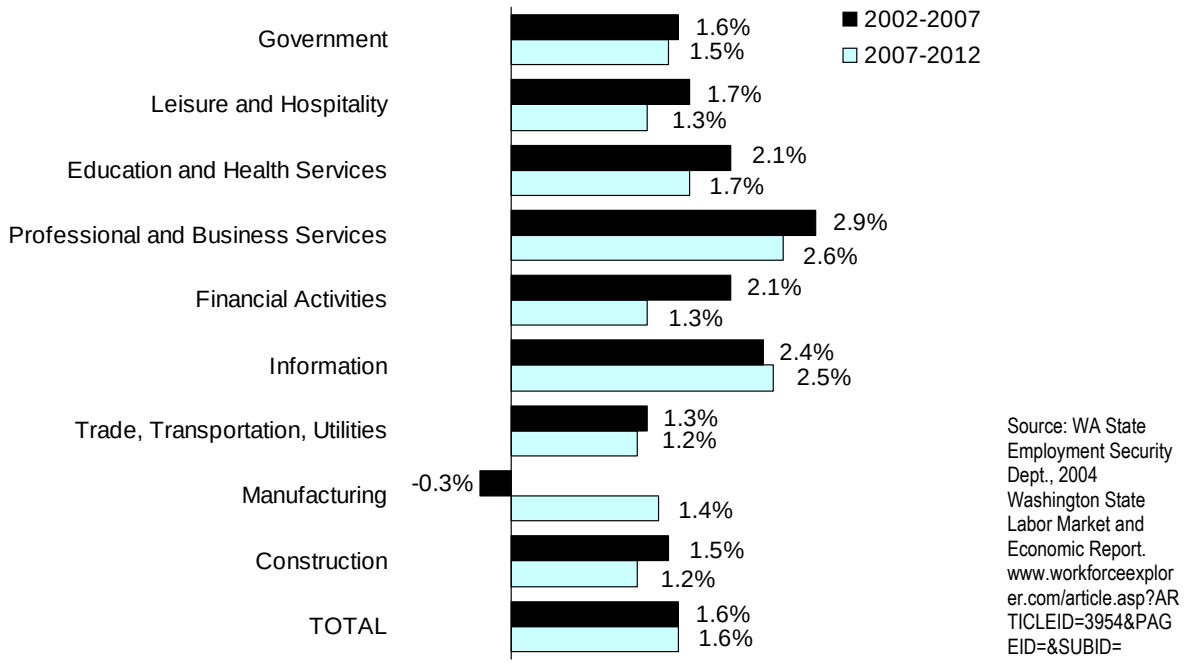


Source: US Bureau of Labor Statistics, State and Area Employment, Hours, and Earnings, data.bls.gov/labjava/outside.jsp?survey=sm, accessed April 23, 2004.

2002 and September 2004 are education and health services; retail trade; wholesale trade; construction; professional, scientific, and technical services; administration, support, waste management, and remediation; government; and leisure and hospitality.[46]

Among non-agricultural industries, information and professional and business services are projected to experience the fastest job growth over the near term, 2002 to 2007, as well as the longer term, 2007 to 2012 (Figure 5). Employment in the manufacturing sector is projected to continue to decline in the near term, but to make some gains over the longer term.

Figure 5. Projected Annual Employment Growth Rates by Industry Sector in Washington, 2002-2007 and 2007-2012



Summary and Implications for Employment-Based Prevention of Chronic Disease

Industry trends in Washington State mirror national trends with a decline in the manufacturing sector and a rise in service-related jobs. The number of jobs in the state in information services, professional and technical services, administrative and waste management services, and other services is expected to continue to grow, over both the near and long term.

Industry sectors that currently account for high proportions of employment, as well as those with employment on the upswing, could be good targets for employer health promotion assistance. The government sector, for example, has accounted for a large proportion of the state's employment since the 1960s and currently is the largest employment sector: in 2003 nearly 20 percent of all employment in the state was in federal, state, or local government.

Manufacturing, though in decline, is still among the top five largest industry sectors in the state, accounting for nearly 10 percent of employment. And agriculture remains an important industry in the state, particularly east of the Cascades. In 2003 agriculture accounted for 10 percent of all jobs in eastern Washington. Along with agricultural jobs come agriculture-*related* jobs, such as food processing, distribution, and retail. Together, these two groups of jobs accounted for nearly 21 percent of all jobs in the state in 2003.

Another way to identify employers for health promotion assistance would be by firm size, under the premise that the larger the firm, the greater number of employees who can be reached. National and local research has shown that larger firms are more likely to offer health benefits to their employees. The largest employers in the state—those with 1,000 or more employees—account for the largest proportion of employment: 17 percent. Widening the range to firms with 250 or more employees yields an even larger proportion: a third of all employees in the state. Data on the relationship between Washington State firm size and the offer of health benefits is examined in Section IV, *Employment-Based Health Insurance in Washington State*.

Examining wage scales can help identify industry sectors for health promotion assistance, bearing in mind that Washingtonians with lower income have worse health status outcomes (see Section I, *Health Status and Health Behaviors of Employed Washingtonians*). Wages in Washington State vary substantially across industries and by firm size. Although they also vary somewhat by geography, this relationship is not clear: it is most likely that wages in any region reflect the types and sizes of industries located there. National research has shown that wages are directly related to whether an employer offers health benefits. This can have a bearing on whether an employer can or will implement additional health promotion policies and programs. The relationship between wages and health benefits in Washington State is reported briefly in Section IV.

~ • ~

IV. Employment-Based Health Insurance in Washington State

To best design employment-based health promotion benefits, policies, and programs requires an understanding of the extent to which Washington workers are covered by employer-sponsored health insurance. What are the health insurance offer and employee uptake rates for full-time and part-time employees and their families/dependents? Do these differ by industry type or firm size? How much of the benefit cost is borne by employers and how much by employees? What are the predictions for employer offer and uptake trends?

Preface: Employer-Sponsored Health Insurance Data

A variety of sources offer data on employer-sponsored health insurance. Because they often differ in their research methods and in how they define various employer characteristics, their information is not always directly comparable. For example, definitions for industry types and firm sizes are often different depending on the source.

Data sources also differ in the amount of detail they provide on employer health insurance offerings and employee acceptance rates, or *uptake*. Some report only broad features, such as whether a firm offers health insurance of any kind to at least some employees. Others provide substantial detail, including what types of plans are offered to which employees.

Employer-sponsored health insurance also can be examined from two vantages: employers and employees. The employer vantage looks at all employers and asks questions about the health insurance benefits they offer. The employee vantage looks at all employees across all firms and asks questions about the health insurance benefits offered them. The employer vantage provides information that can be used to target specific types of employers for particular kinds of health promotion assistance. The employee vantage allows for targeting specific types of employees.

Finally, wherever state-level information on employee coverage is thin, national survey data are often used as a proxy to illustrate general patterns. Despite these caveats, information from different sources provides

Health Insurance Fast Facts

- Availability of employer-sponsored health insurance in Washington State varies by industry, firm size, and certain employment characteristics, such as full or part-time status, temporary or permanent status, and union membership.
- Full-time employees are much more likely than part-time to be offered health insurance for themselves and their family members/dependents. Offer rates for full-time employees range from 72 percent of firms with 4-19 employees to 97 percent of firms with 100 or more.
- Overall, employees in Washington State pay about 10 percent of the total health insurance premium for their personal coverage, but 17-25 percent for family/dependent coverage.
- Retiree coverage has been declining for several years, and is further threatened by recent changes to the federal Medicare program.
- Both employers and insurers have begun to experiment with new health plan designs that offer flexible benefit and financing structures to help constrain both employer and employee costs.

a relatively complete picture of the relationship between various industry, firm, and employee characteristics and the extent of employee health insurance coverage in Washington State.

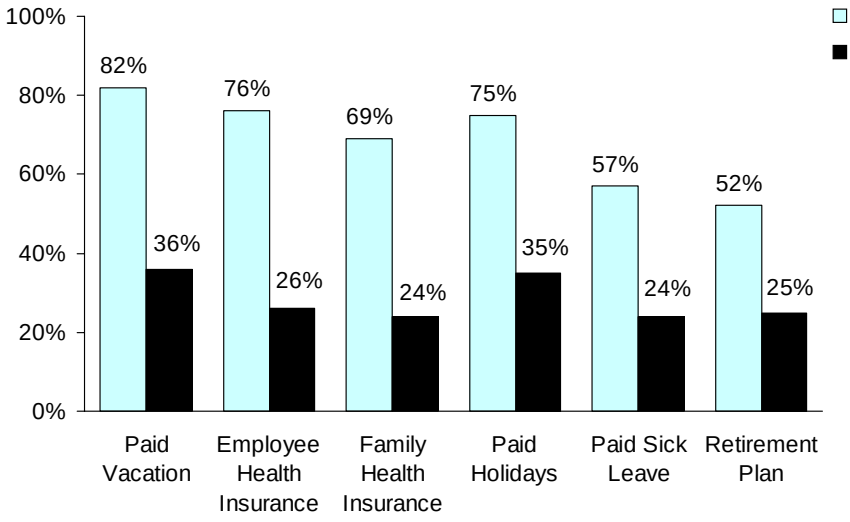
A. Employer Provision of Health Insurance

Employers are the leading source of health insurance for Americans under age 65, sponsoring coverage for 161 million people. They also sponsor coverage for 12 million people age 65 and over, an age group comprising mostly retirees.[52] In Washington State, 64 percent of the population is covered by employer-sponsored health insurance.[53]

In 2003, 76 percent all Washington firms offered health insurance to at least some full-time employees (Figure 6). For perspective, they offered paid vacation and paid holidays at similar rates, but sick leave and retirement benefits at much lower rates. Part-time employees fared worse: only 26 percent of firms offered part-time employees health insurance and a similar proportion offered sick leave and retirement benefits.

Sixty-nine percent of Washington firms offered health insurance to family members/ dependents of full-time employees (see Figure 6). Again, part-time employees fared worse: 24 percent of firms offered health insurance benefits for their family members/dependents.

Figure 6. Percent of Washington State Firms Offering Various Benefits to Full or Part-Time Employees, 2003



Source: WA State Employment Security Dept., *Washington State 2003 Employee Benefits Survey*, March 2004, www.workforceexplorer.com/admin/uploadedPublications/2201_EmplBenefits3_04.pdf. This chart measures the percent of firms that offer insurance or other benefits to at least some of their employees. Some employees in firms that offer insurance may not be eligible.

A.1 Health Insurance Offer by Industry

Employer Vantage

Looking across all industrial sectors in Washington State, three—management of companies and enterprises, finance and insurance, and public administration—have health insurance offer

rates to full-time employees at 98 percent or better (Table 16).[†] They also have nearly universal offer rates to family members/dependents. Six additional sectors have offer rates

Table 16. Percent of Firms in Washington Offering Employee and Family Health Insurance by Industry, 2003*

	Number of Firms	Number of Employees	Percent Offering Health Insurance to: Full-Time Employees	Part-Time Employees	Dependents of Full-Time Employees	Dependents of Part-Time Employees
Management of Companies and Enterprises	296	32,300	100%	[a]45%	100%	[a]48%
Finance and Insurance	3,655	103,800	99%	63%	98%	63%
Public Administration[b]	404	520,600	98%	76%	98%	40%
Utilities	178	4,400	[a]94%	48%	[a]96%	45%
Wholesale Trade	4,438	115,700	93%	20%	89%	20%
Professional, Scientific, and Technical Services	4,904	135,900	92%	32%	85%	32%
Health Care	6,059	225,300	91%	40%	78%	36%
Information	1,487	91,900	91%	45%	86%	45%
Mining[b]	25	8,800	90%	0%	90%	0%
Transportation and Warehousing	1,816	83,400	88%	28%	77%	24%
Manufacturing	4,540	266,700	87%	23%	81%	21%
Educational Services	1,005	41,600	84%	60%	75%	54%
Other Services	4,533	99,300	80%	23%	70%	22%
Real Estate/Leasing	2,253	48,700	79%	21%	72%	19%
Social Assistance	1,789	45,300	78%	39%	68%	37%
Construction	6,828	156,100	76%	19%	70%	15%
Retail Trade	10,858	306,700	74%	24%	66%	23%
Arts, Entertainment, Recreation	1,058	42,300	71%	26%	51%	12%
Admin/Support, Waste Management & Remediation	3,365	122,900	69%	19%	63%	18%
Accommodation & Food Svcs	8,618	206,400	40%	10%	32%	8%
Agriculture, Forestry, Fishing, Hunting	2,219	79,500	37%	[a]7%	34%	[a]8%

NOTES: *This table measures the percent of firms that offer insurance to at least some of their employees. Some employees in firms that offer insurance may not be eligible. [a] Data discrepancies in insurance offer rates are the result of respondent reporting error and probability distributions (margin of error ±3%). [b] Washington State employment figures by NAIC category were not available for these industry titles. Categories used in their place were: for *Mining*—Natural Resources and Mining; for *Public Administration*—Government.

Sources: 1) WA State Employment Security Dept., *Washington State 2003 Employee Benefits Survey*, March 2004, www.workforceexplorer.com /admin/uploadedPublications/2201_EmplBenefits3_04.pdf. 2) WA State Employment Security Dept., *Nonagricultural Wage and Salary Workers Employed in Washington State, 2003—Benchmark: December 2003*, www.workforceexplorer.com.

[†] These industrial sectors are defined by the North American Industry Classification System (NAICS). For a definition of each sector, see www.census.gov/epcd/naics02/naicod02.htm.

at 90 percent or better. Together, these industries employ 45 percent of Washington workers

Health insurance availability to part-time employees lags within all industries, ranging from as low as 7 percent (agriculture, forestry, fishing, hunting) to as high as 76 percent (public administration). Most industries also have lower family/dependent offer rates for both full-time and part-time employees. With the notable exception of public administration and arts, entertainment, and recreation, most industries offer health insurance to part-time employees' family members/dependents at nearly the same rates as to the employees themselves.

Employee Vantage

The state Office of Financial Management (OFM) examined the 2002 Washington State Population Survey to assess the proportion of Washington workers in various industries who were covered by employer- or union-sponsored health insurance. The results are presented in Table 17. The industry sectors do not exactly match, but are quite similar to those in Table 16, which were developed by the state Employment Security Department using a different data source. The data in the tables also are for different years—2003 for Table 16, 2002 for Table 17. But keeping these provisos in mind, the two tables do offer a general idea of employer health insurance offer rates by broad industry categories from the employer vantage—Table 16—and the employee vantage—Table 17.

The OFM data in Table 17 indicate that over 90 percent of employees in the manufacturing sector were enrolled in employer- or union-sponsored health insurance in 2002. Enrollment rates were over 80 percent for several other combined industry sectors. Enrollment among agriculture, forestry, and fishing employees was quite low, at 52 percent.

Table 17. Employees in Washington State Enrolled in Employer or Union Sponsored Health Insurance, by Industry, 2002

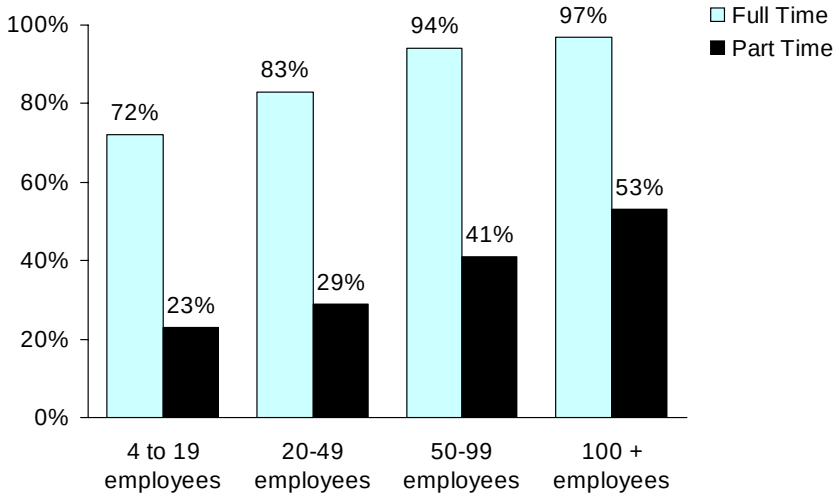
Industry Sector	Employees Covered
Manufacturing	93%
Transportation, Communication, Utility	86%
Wholesale, Retail	83%
Finance, Insurance, Real Estate	76%
Services	72%
Construction, Mining	71%
Agriculture, Forestry, Fishing	52%

Source: WA State OFM, Forecasting Division. *Health Insurance by Work Characteristics: 2002.* Research Brief 22, January 2004. www.ofm.wa.gov/researchbriefs/brief022.pdf

A.2 Health Insurance Offer by Firm Size

The likelihood that Washington firms will offer health insurance to either full-time or part-time employees goes up with firm size (Figure 7). But offer rates to full-time employees far outpace those to part-time employees, regardless of firm size. The range in offer rates for

Figure 7. Percent of Washington State Firms Offering Health Insurance Benefits to Full- or Part-Time Employees, by Firm Size, 2003

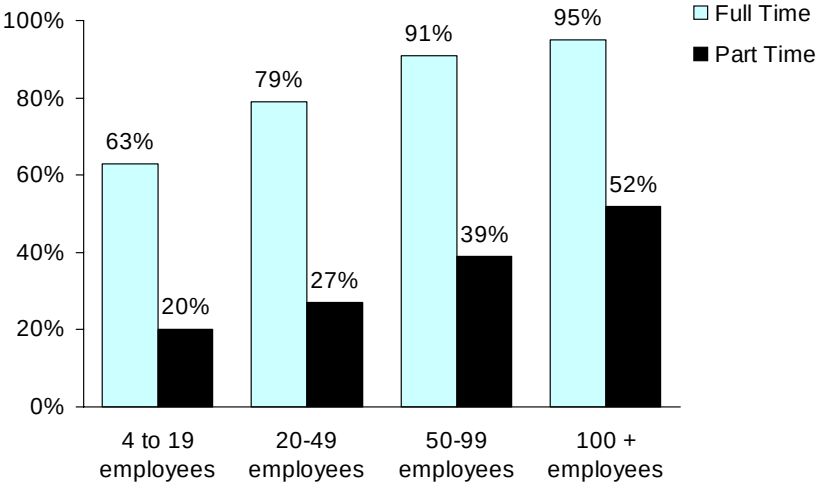


Source: WA State Employment Security Dept., *Washington State 2003 Employee Benefits Survey*, March 2004, www.workforceexplorer.com/admin/uploadedPublications/2201_EmplBenefits3_04.pdf. This chart measures the percent of firms that offer insurance to at least some of their employees. Some employees in firms that offer insurance may not be eligible.

full-time employees begins fairly high at 72 percent of firms with 4-19 employees and increases to 97 percent of firms with 100 or more. The range for part-time employees begins at 23 percent of firms with 4-19 employees and increases to 53 percent of firms with 100 or more. As a reminder, in 2004 firms with 100 or more employees accounted for only 1.8 percent of all firms in the state but 47 percent of all employees (see Table 13, p. 34).

Similar patterns are apparent for family/dependent coverage (Figure 8). Although this benefit is somewhat less likely to be offered than individual employee coverage, offer rates go up with firm size. Among the smallest workplaces (4-19 employees), 72 percent offer

Figure 8. Percent of Washington State Firms Offering Health Insurance Benefits to Family Members/ Dependents of Full- or Part-Time Employees, by Firm Size, 2003



Source: WA State Employment Security Dept., *Washington State 2003 Employee Benefits Survey*, March 2004, www.workforceexplorer.com/admin/uploadedPublications/2201_EmplBenefits3_04.pdf. This chart measures the percent of firms that offer insurance to at least some of their employees. Some employees in firms that offer insurance may not be eligible.

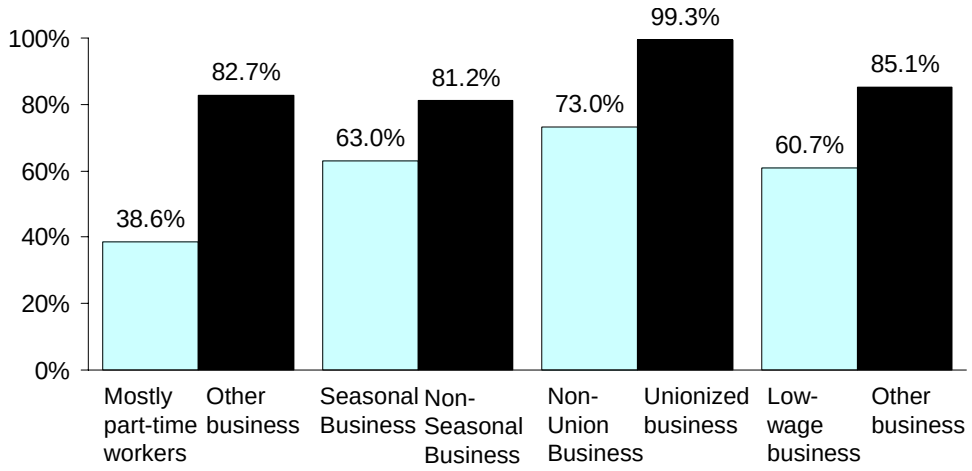
health insurance to full-time employees (Figure 7), and 63 percent offer it to family members/ dependents (Figure 8). Among the largest workplaces (100 or more employees), 97 percent offer insurance to full-time employees and 95 percent offer it to family members/dependents. The proportion of firms offering family/dependent coverage to part-time employees also increases with firm size, from 20 percent for the smallest firms to 52 percent for the largest.

A.3 Health Insurance Offer by Various Other Firm Characteristics

Employee Vantage

Data on health insurance offer rates in Washington State by various other firm characteristics are available only from the employee vantage. In 2000, employees in unionized firms were almost certain to be offered health insurance (Figure 9). Employees were less likely to be offered health insurance where employment tended to be part-time, seasonal, non-union, or low-wage. If a firm employed mostly young or mostly female workers, this also translated into reduced availability of health insurance (Figure 10, next page).

Figure 9. Percent of Washington Employees, by Various Employee, Firm, or Wage Characteristics, Who Work in Firms that Offer Health Insurance, 2000*



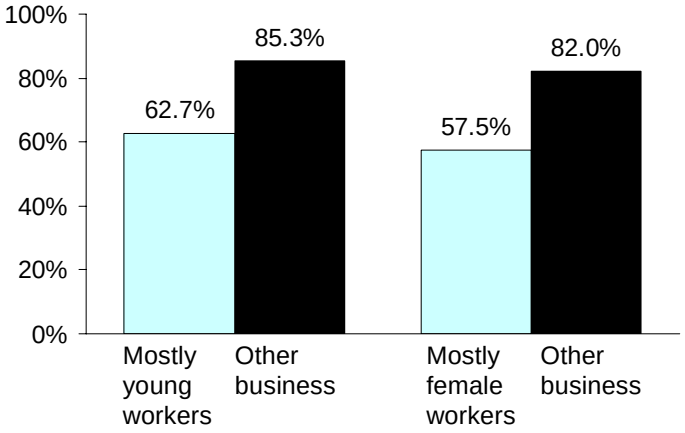
Source: UW HPAP, WA State Planning Grant on Access to Health Insurance, *Targeting the Uninsured in Washington State*, sponsored by WA State OFM. www.ofm.wa.gov/accesshealth/products.htm. Estimates derived from 1997 Robert Wood Johnson Survey and 2000 Washington State Population Survey.

* Definitions used in this figure are: seasonal businesses have at least half of workers reported as seasonal or temporary; part-time businesses have more than half of employees working fewer than 20 hours per week; low wage businesses have two-thirds of employees making less than $10 per hour; and unionized businesses have all or part of their workforces unionized.

B. Employee Eligibility for Health Insurance

An offer of employer-sponsored health insurance is one thing, whether the employee is *eligible* to accept the offer is another. The difference between the number of employees a firm has and the proportion who are eligible for the firm's health insurance benefit can be quite large. This will affect the type of health promotion assistance given to employers—for example, the level of emphasis placed on health insurance versus other activities, including workplace health promotion policies and workplace-based health promotion programs.

Figure 10. Percent of Washington Employees by General Age and Gender Characteristics Who Work in Firms that Offer Health Insurance, 2000*



Source: UW HPAP, Washington State Planning Grant on Access to Health Insurance, *Targeting the Uninsured in Washington State*, Sponsored by WA State Office of Financial Management. www.ofm.wa.gov/accesshealth/products.htm. Estimates derived from 1997 Robert Wood Johnson Survey and 2000 Washington State Population Survey.

* Definitions used in the figure are: predominantly young businesses have at least 30 percent of workers under 30 and no workers over age 50; mostly female businesses have 90 percent or more female workers.

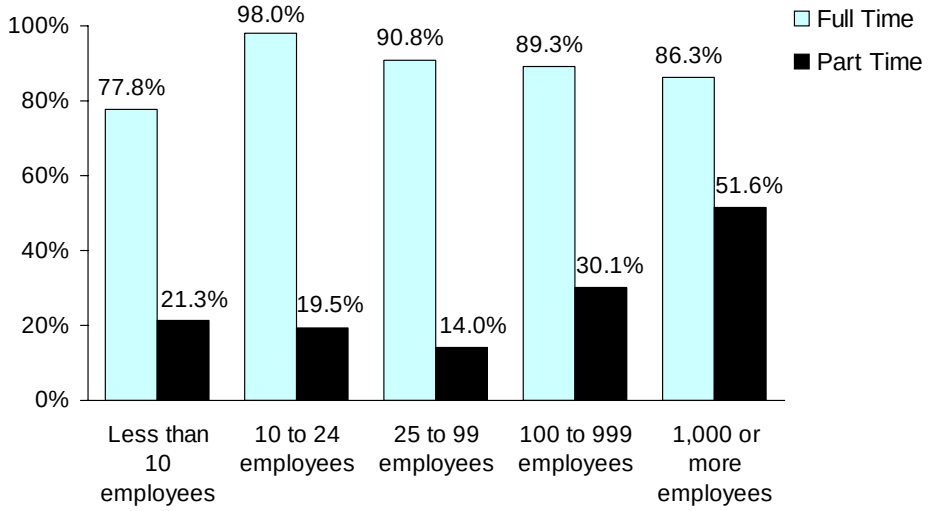
Employee eligibility for health insurance can depend on many factors, such as whether the employee's position is full or part-time; seasonal; or temporary or permanent (not all temporary jobs are seasonal). Other factors may include probation periods for new employees, during which they are ineligible for employee benefits; insurance eligibility waiting periods; or health condition exclusions in the insurance policy or policies being offered.

Washington State data on employee eligibility for health insurance are available only for private-sector firms that offer health insurance. (As a reminder, the private sector accounted for about 80 percent of all employees in the state in 2003; see Table 12, p. 33). In 2001, well over 80 percent of employees were eligible for the coverage offered across all firms with 10 or more employees (Figure 11). Firms with 10-24 employees had the highest proportion of eligible employees, at 98 percent. Firms with fewer than 10 employees had the lowest, at 77.8 percent.

The high eligibility proportions did not hold for part-time employees. With the exception of firms with 1,000 or more employees, less than a third of part-time employees in firms of any other size were eligible for the insurance offered them (Figure 11). And even in the large firms, only a bare majority—51.6 percent—was eligible.

Employees might be eligible for the health insurance benefit offered by their employer but still might not accept it. The national Medical Expenditure Panel Survey (MEPS) offers Washington State data on employer offer, employee eligibility, and employee uptake by firm size (Figure 12). For ease of comprehension, the data presented here are those that MEPS grouped into two categories: *fewer than 50* and *50 or more* employees. They indicate that in 2002, 62 percent of working Washingtonians employed in private-sector firms with *fewer than 50* employees worked in firms that offered health insurance. Eighty-two percent of these employees were eligible for the health insurance benefit and of those who were

Figure 11. In Washington Private-Sector Firms That Offer Health Insurance, the Percent of Employees Eligible for the Benefit by Firm Size and Full- and Part-Time Status, 2001

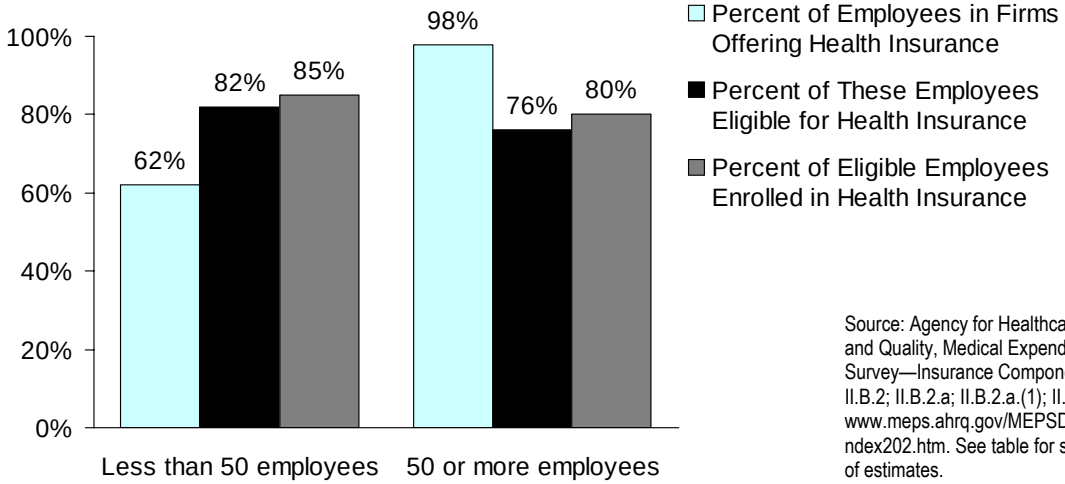


Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey—Insurance Component, Table II.B.3.b.(1)(2001). www.meps.ahrq.gov/MEPSDATA/ic/2001/Index201.htm. See tables for standard errors of estimates.

eligible, 85 percent accepted the benefit. This translates into 69 percent of employees in the firms that offered health insurance accepting the benefit.

In the second category, private-sector firms with *50 or more* employees, 98 percent of Washingtonians employed by such firms worked in firms that offered a health insurance benefit. Seventy-six percent of these employees were eligible for the benefit and of those eligible, 80 percent accepted the benefit. This translates into 60 percent of employees in the firms that offered health insurance accepting the benefit.

Figure 12. Percent of Washington State Private Sector Employees Offered, Eligible for, and Enrolled in Health Insurance, 2002



Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey—Insurance Component, Tables II.B.2; II.B.2.a; II.B.2.a.(1); II.B.2.b (2002). www.meps.ahrq.gov/MEPSDATA/ic/2002/Index202.htm. See table for standard errors of estimates.

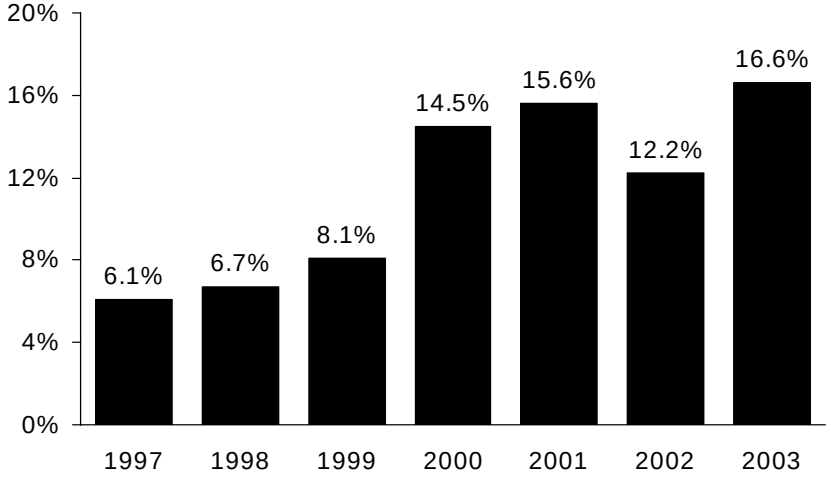
C. Employee Health Insurance Costs

C.1 Overall Premiums: Employer Plus Employee Share

In each of the four years from 2000-2004, employers nationwide saw their insurance premiums rise at double digit rates—for a 59 percent increase overall. Between 2003 and 2004, employers' average premium increase outpaced both the economy-wide inflation rate and the nationwide increase in workers' hourly earnings—by nine percentage points.[54] In response, employers shifted some of the cost burden to employees through various mechanisms, such as a higher premium share, higher deductibles, and increased co-payments and co-insurance.

The Washington State Office of the Insurance Commissioner (OIC) examined total premiums paid, by both the employer and the employee, by firms with 50 or fewer employees in the period 1997-2003. The data revealed that premiums for these smaller businesses increased at double-digit rates between 2000-2003 (Figure 13). Because the state does not collect premium information for large-group health plans (which would include larger employers), similar information in premium trends for larger firms is not available. A survey of employers in Washington State conducted by Kibble & Prentice in 2004 found that 58 percent of all firms that responded to the survey, of all sizes, experienced premium increases of at least 11 percent between 2002 and 2003. Thirty percent saw increases of between 16 and 30 percent.

Figure 13. Annual Average Increase in Small Group (50 or fewer employees) Premiums in Washington State, 1997-2003



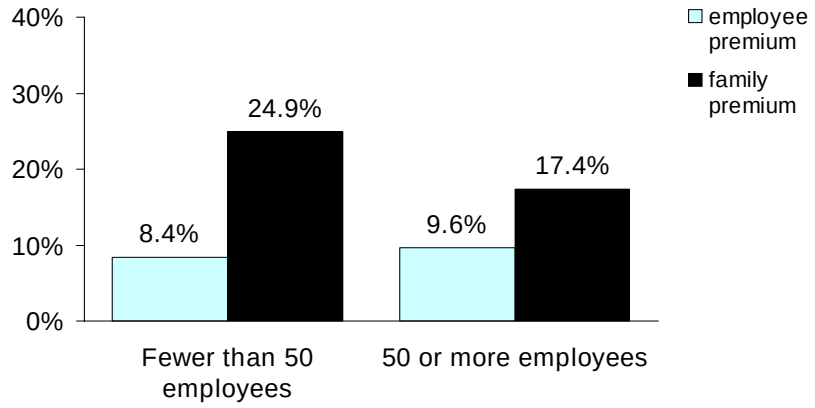
Source: WA State Office of the Insurance Commissioner. Price increases are based on a standardized coverage package.

C.2 Employee Premiums

In 2002 (the most recent year for which data are available), MEPS data indicate that the proportion of the health insurance premium paid by employees in Washington State for their personal coverage was relatively low—between 8 and 10 percent—regardless of firm size

(Figure 14). For family/dependent premiums, however, the employee portion was much higher: 25 percent for firms with fewer than 50 employees and 17 percent for those with 50 or more.

Figure 14. Percent of Premium Paid by Employees in Washington State for Employee and Family/ Dependent Coverage, by Firm Size, 2002



Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey—Insurance Component, www.meps.ahrq.gov/MEPSDATA/ic/2002/Index202.htm. See table for standard errors of estimates.

Although more recent data are not available for the employee share of premium costs in Washington State, this share has more than likely increased since 2002 given that employers nationwide have increased employee cost sharing in general—including premiums—in the past three years.[55] The 2004 Kaiser Foundation/Health Research Educational Trust (HRET) *Annual Employer Health Benefits Survey* found, for example, that 15 percent of all firms (small and large) were very likely to increase employees' share of premiums for family coverage in the next two years.[56]

C.3 Other Employee Cost Sharing

The 2003 Kaiser/HRET survey found that 65 percent of employers had increased the amount employees paid for health insurance in general in the year prior to the survey (2002-2003). Increases included the amount employees paid for deductibles (29 percent of employers), co-pays and co-insurance (34 percent), and prescription drugs (47 percent). A year later, the 2004 survey reported that 52 percent of large firms (200 or more employees) were "very likely" to increase the amount employees would be expected to pay for coverage in the next year (that is, 2004-2005), including deductibles (14 percent of employers), co-pays and co-insurance (14 percent), and prescription drugs (18 percent). Another 15 percent of small firms (3-199 workers) were very likely to do the same.

The 2004 Kibble & Prentice survey of Washington employers found that 54 percent of the survey respondents had increased health plan deductibles that year and 32 percent had done so in 2003. Thirty percent increased office and drug co-payments, and 30 percent increased employee co-insurance or out-of-pocket maximums.[57]

C.4 Employer Attitudes Toward Employee Cost Sharing

The 2004 Kaiser/HRET national survey found that small and large firms differ significantly in the importance they place on paying a portion of the health benefit for both employees and employees' family members/dependents. Seventy-three percent of large firms (200 or more employees) and 43 percent of small firms (3-199 employees) felt that it is important that the firm pay a "significant portion" of the health benefits costs for both employees and family members/dependents. The remaining firms, however, both large and small, felt that the primary responsibility for funding the costs of family members/dependents was with the employee.

D. Retiree Coverage

D.1 Level of Coverage in the U.S. and Washington State

Understanding the level of retiree health insurance in Washington State helps in designing assistance that is best suited to the needs of the state's employers. Offering health promotion assistance to those employers that offer retiree health insurance also increases the potential for reaching larger numbers of people.

The 2004 Kaiser/ HRET survey found that nationally, large firms (200 or more employees) are much more likely to offer retiree health insurance benefits than are smaller firms (3-199 employees) (Table 18). Large firms that have union workers also are much more likely to offer retiree coverage (60 percent) than those that do not (22 percent). State and local governments of any size are more likely to offer retiree benefits than are private-sector industries. And 96 percent of all large firms that offer retiree benefits offer them to pre-Medicare retirees—that is, people who retire before age 65, the Medicare-eligible age—but only 75 percent offer benefits to Medicare-age retirees.

Table 18. Among Employers Nationally That Offer Health Benefits to Active Workers, Percent Offering Retiree Benefits, by Industry, 2004

Industry	All Small Firms (3-199 Employees)	All Large Firms (200 or More Employees
All Firms	5%	36%
Mining/Construction/Wholesale	8%	27%
Manufacturing	4%	32%
Transportation/Communications/Utilities	4%	53%
Retail	3%	10%
Finance	2%	43%
Service	5%	36%
State/Local Government	*27%	*77%
Health Care	*0%	*22%

* Estimate is statistically different from "All Firms" (p<.05).

Source: Kaiser/HRET Survey of Employer-sponsored Health Benefits: 2004. www.kff.org.

The availability of employment-based retiree coverage is steadily declining both nationally and in Washington State. At the national level, the 2004 Kaiser/HRET survey found that the proportion of large firms that offer benefits to retirees dropped from 66 to 36 percent in the 16 years between 1988 and 2004. Only 10 percent of smaller firms (3-199 employees) offered such coverage in 2003, and this proportion dropped to 5 percent in 2004.[56]

The *2004 National Survey of Employer-Sponsored Health Plans* sponsored by Mercer Human Resource Consulting uses different categories for firm size but finds similar low levels of retiree coverage nationwide. The proportion of firms with 500 or more employees that offered benefits to pre-Medicare retirees dropped from 46 to 28 percent in the 11 years between 1993 and 2004. The proportion offering coverage to Medicare-eligible retirees dropped from 40 to 20 percent.[58]

Although analogous trend data are not available for Washington, earlier surveys indicate similarly low levels of retiree coverage in the state. For example, the Washington State sample from Mercer's *National Survey of Employer-Sponsored Health Plans* for the year 2000 indicates that 17 percent of firms with 500 or more employees offered coverage to pre-Medicare retirees and 13 percent offered coverage to Medicare-age retirees that year. National numbers for 2000 were 31 and 24 percent, respectively. Sample size issues preclude direct comparisons between Washington State and national data, so it is only conjecture that retiree coverage in the state may have been lower than the national average for that year.[59]

Downward trends in retiree coverage are likely to continue. According to the *Kaiser/Hewitt 2004 Survey on Retiree Health Benefits*, 8 percent of U.S. employers with 1,000 or more employees terminated benefits for *future* retirees in 2004 (on top of the 10 percent that did so in 2003), and another 11 percent said such a move is somewhat or very likely in 2005.[60]

D.2 New Medicare Benefits and Associated Retiree Health Insurance Rules

Medicare Modernization Act of 2003

The availability of employment-based retiree coverage could be affected by the Medicare Modernization Act of 2003 (MMA), particularly by the prescription drug and preventive care benefits the Act adds to Medicare. The provision of these benefits may act as incentives for employers to reduce or drop their retiree coverage.

Prescription drug coverage is one of the most important benefits of employment-based retiree coverage. More than one in three retirees age 65 or older—all of whom are eligible for Medicare—have employer-sponsored prescription drug coverage.[60] The new prescription drug coverage provided through the MMA could tempt employers to end their own prescription drug coverage for their Medicare-eligible retirees. Estimates published in 2004 by the U.S. Department of Health and Human Services predicted that as many as 3.8 million retirees who currently have retiree prescription drug benefits might see those benefits reduced or terminated as a result of the new law.[61] As an acknowledgement of this potential outcome, new MMA regulations issued in late January 2005 describe several measures designed to encourage employers to retain their coverage. The measures rely on tax-free subsidies for employer drug coverage, particularly for coverage that is "as good as or better than the Medicare benefit."[62] Criticism of the regulations focuses on these subsidies, noting

that employers who currently have more generous benefits could reduce their coverage to meet the *as good as* standard and receive tax-free subsidies from the government for doing so, leaving retirees with reduced benefits.[63] The Kaiser/Hewitt 2004 Survey found that 58 percent of responding private firms with 1,000 or more employees reported they would likely continue to offer retiree prescription drug coverage and accept the tax-free federal subsidy.[64]

The MMA also added a number of preventive health care benefits to Medicare that will begin to be covered in 2005. These include an initial routine physical examination, blood screening for heart disease, and diabetes tests and related services.[65] These expanded benefits also could encourage employers to reduce or drop coverage for Medicare-eligible retirees.

EEOC Final Rule on "Age Discrimination in Employment Act; Retiree Health Benefits."

A 2004 final rule that is anticipated, but has not yet been published, by the U.S. Equal Employment Opportunity Commission (EEOC) also might affect employers' willingness to offer health insurance coverage to future retirees. It states that employers who provide retiree benefits *can* reduce, alter, or eliminate these benefits once a retired employee becomes eligible for Medicare without violating the national Age Discrimination in Employment Act (ADEA). Given Medicare's newly expanded drug and preventive care coverage, this rule could encourage employers to reduce, alter, or eliminate their coverage for Medicare-eligible retirees.[66]

E. Sources of Employer Health Insurance

E.1 Health Insurers and Employee Benefits Brokers Serving Washington Employers

In its 2003 *Annual Report*, the Washington State OIC reported that 25 insurers, 20 of which were domiciled in the state, were authorized to offer health insurance products in Washington in 2003. The top health insurers, excluding those who served primarily public programs (such as Medicaid and Basic Health), were Premera Blue Cross, Regence BlueShield, and Group Health Cooperative (Table 19).[67] Together, these three insurers controlled over half

Table 19. Top Three Health Insurers in Washington State, Excluding Those Whose Primary Book of Business is Public Programs, 2003*

Health Insurer	2003 Enrollment‡	Market Share†	Sample Clients
Premera Blue Cross	794,255	21.0%	Overlake Hospital; WA State Farm Bureau; Tully's Coffee
Regence Blue Shield	937,114	17.4%	Would not disclose.
Group Health Cooperative	435,482	15.0%	State of WA; King County; Nordstrom; General Motors; Home Depot

NOTES: * Sample client information was taken from the *Puget Sound Business Journal*'s Book of Lists, July 30-Aug. 5, 2004 [see Reference 48] and was not checked against other sources. ‡ Includes subscribers and eligible dependents.
† Calculated on premiums earned.

Source: WA State Office of the Insurance Commissioner, *2003 Insurance Annual Report for Washington State*. www.insurance.wa.gov/publications/annualreports/2003ReportAppendix/2003overall.asp.

the state's health insurance market. All were domiciled in Washington. According to the *Puget Sound Business Journal's* annual health care special section (July 2004) their clients included, among others, state and county government employees, large manufacturers, retailers, hospitals, and food service companies.[68] Although the geographic reach of the top insurers is broad, some of the state's rural counties are served by only one of the three. Often, such counties also have fewer of the state's other health plans serving them, as well.

Compiled data on employee benefits brokers in Washington State is thin. According to the *Puget Sound Business Journal*, in 2004 the largest insurance brokerages in the Puget Sound region, ranked by premium volume, were Marsh/Mercer HR Consulting/Guy Carpenter; Aon Group; MCM, a Meisenbach Company; and Kibble & Prentice.[69]

E.2 Self-Insured Firms

Some firms choose to self-insure, which means they assume the financial risk of their employees' health care costs, rather than purchasing health insurance. These firms may be exclusively self-insured or offer a self-insured plan as one of several health plan offerings.

Unlike products a firm purchases from a health insurer, a self-insured plan is not subject to state health insurance regulation, including any benefits the State mandates must be included in a health insurance product. Self-insured plans must, however, set their own *reserves*, premium rates, and co-insurance requirements, as well as purchase *re-insurance* to reduce their overall risk. (*Reserves* are funds set aside so that a company is able, at any given time, to meet all claims on the health insurance then in force. *Reinsurance* is insurance or indemnification by a second insurer of all or part of a risk assumed by the first insurer—in this case, the self-insured company.[70])

Data from 2002 indicate that the propensity among Washington firms to self-insure goes up with firm size (Figure 15). Very few firms with fewer than 100 workers have self-insured plans. Among mid-size firms (100-499 employees) about a third have a self-insured plan. At 500 or more employees, the proportion that offer a self-insured plan exceeds 75 percent.

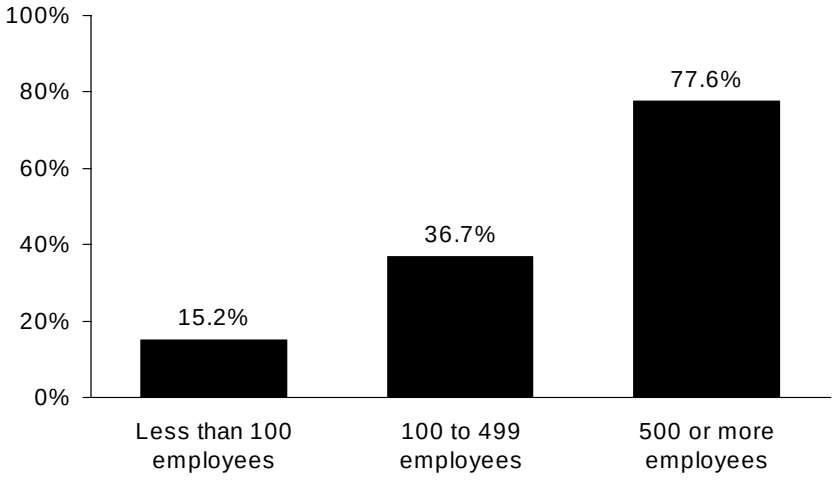
Self-insured firms often use a third-party administrator, or TPA, to manage the administrative aspects of the health insurance benefits they offer, such as paying claims, providing customer service, producing booklets and ID cards, and promulgating treatment guidelines.[71]

E.3 Employer Decision-Making About Insurance Product Purchasing

Only limited information is available about what factors Washington employers consider in making their health insurance purchasing decisions. National surveys shed some light on this for employers in general. The 2003 Kaiser/HRET survey found, for example, that 80 percent of employers identified cost of the plan as a "very important" feature in shopping for health insurance (Figure 16). Two-thirds (66 percent) identified a broad physician network, and over half (54 percent) identified the range of benefit options offered.[72]

The survey also found that 62 percent of all firms had shopped for a new plan in 2003, and 33 percent had either changed health plan types or insurance carriers. A year later, the 2004

Figure 15. Percent of Private Washington Firms Offering Health Insurance that Self Insure at Least One Plan, by Firm Size, 2002

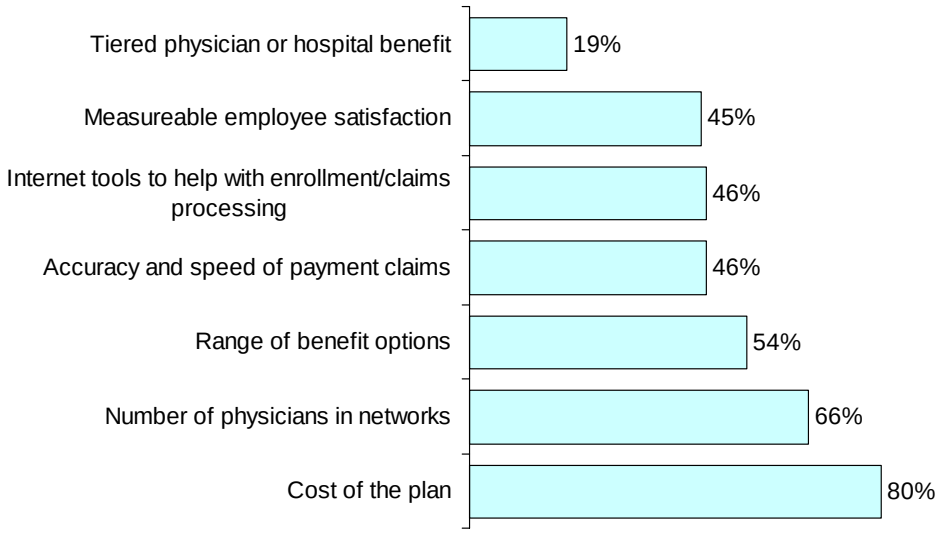


Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey—Insurance Component, www.meps.ahrq.gov/MEPSDATA/ic/2002/Index202.htm. See table for standard errors of estimates.

Kaiser/HRET survey revealed that the proportion of employers shopping for a new plan dropped to 56 percent, but the proportion choosing a new plan (34 percent) and changing insurance carriers (31 percent) remained essentially the same.[73]

In response to a survey of employers in Washington State conducted by the Washington State Employment Security Department in 2003, 73 percent of firms indicated the primary reason they did *not* offer health insurance to their employees was that it was too expensive. Over 70 percent of employers across all firm-size categories cited cost as the primary deterrent to

Figure 16. Features Listed as "Very Important" in Kaiser/HRET Survey of Employer-Sponsored Health Benefits, 2003



Source: Kaiser/HRET Survey of Employer-Sponsored Health Benefits: 2003; www.kff.org.

offering health insurance, although the proportion citing this reason decreased as firm size increased:

WA Employers 2003	4-19	20-49	50-99	100+	All firms
Health Insurance too Expensive to Offer	75%	69%	64%	62%	73%

The third most frequent reason cited by all firms, regardless of firm-size category, was that their competitors did not offer health insurance—cited by 8 percent of the survey respondents, overall.[74] (The second most frequent reason cited by all firms, regardless of firm size category, was "don't know why.") At the national level, the 2004 Kaiser/HRET survey found that among firms with 3-199 employees, "high premiums" was the most frequently cited reason for not offering any health benefits—selected by 79 percent of respondents.

F. New Plans and Products in the Employment-Based Health Insurance Sector

F.1 Consumer-Directed Health Plans

A recent and possibly influential trend in the insurance market is employers' growing interest in *consumer directed health plans*. To supporters, *consumer-directed* means an educated consumer making health care purchasing decisions to maximize value and reduce unnecessary spending. To detractors, *consumer-directed* translates into reducing potentially appropriate and timely health care use by shifting more of the decision-making and costs to enrollees—who may or may not have sufficient information to make an informed decision. Some recent evidence suggests that the consumer-directed approach may be taking hold as continuing increases in health care costs, coupled with continued slow economic expansion, prompt businesses to look for ways to reduce their health benefit expenditures.

Consumer directed health plans encompass an array of possible mechanisms for employed individuals to purchase health insurance. All create a financing mechanism for covering health care expenditures, but they differ fundamentally in other ways.

Health Savings Accounts

The Medicare Modernization Act of 2003 authorized tax-favored Health Savings Accounts (HSAs). These are tax-free financial investment accounts earmarked for medical expenses and they must be coupled with a high-deductible health insurance policy (often referred to as a *catastrophic* policy), with a minimum deductible of $1,000 for an individual and $2,000 for a family. HSA holders use the account to cover health care expenditures up to their deductible, and to pay for services not covered by their health insurance policy. HSA enrollees must be under age 65, although withdrawals from these accounts can continue after age 65. Deposits (or *contributions*) into an HSA roll over from year to year, so unspent funds can accumulate along with tax-free interest. Whether started by an individual or in conjunction with an employer-sponsored health plan, an HSA belongs to the individual and is therefore portable. For example, if started in conjunction with an employer-sponsored health plan the HSA belongs to the employee and remains hers if she leaves the firm.[75]

HSAs were preceded by Medical Savings Accounts (MSAs), which were authorized in the federal 1996 Health Insurance Portability and Accountability Act (HIPAA). MSAs were

similar to HSAs in that they combined a high-deductible health plan with a tax-advantaged medical savings account. MSAs were available only to self-employed individuals and employees of businesses with 50 or fewer workers. In addition, either employers or employees could fund MSAs in a given year, but not both. Because of these and other restrictions, and because they were only authorized for a defined time period, MSAs did not sell well.

HSAs and Health Promotion. How HSAs will affect employer-based prevention and wellness benefits is not yet clear. The law authorizing HSAs includes a preventive care "safe harbor," wherein the high-deductible health plan that is coupled with the HSA can allow full coverage of preventive care with either no deductible or a deductible below the minimum annual deductible. Preventive care that can be covered by an HSA-coupled health plan includes (but is not limited to):

- Periodic health evaluations, including tests and diagnostic procedures
- Routine prenatal and child care
- Child and adult immunizations
- Tobacco cessation programs
- Obesity weight-loss programs
- A large set of screening services, including heart and vascular, cancer, and metabolic diseases, among many others.[76]

Preventive care coverage also can include drugs or medications, and HSA funds can be used to purchase other prescription drugs, as well.[77] Internal Revenue Service (IRS) definitions of preventive care will trump state law with regard to the coverage allowed within a high-deductible health plan.

Because IRS regulations are still being issued, the precise definition of benefits that will be allowed and not allowed may change.[78] For example, the IRS has clarified that benefits an employee receives under an Employee Assistance Plan, a disease management plan, or an employee wellness program are separate from benefits received through an HSA, and do not disqualify the employee from also contributing to an HSA.[79]

HRAs and FSAs

Health Reimbursement Arrangements (HRAs) are accounts set up by employers to reimburse employee medical expenses. They are considered to be a vehicle for covering out-of-pocket health expenses, rather than a full embodiment of consumer-directed health care. Although the money in these accounts can be rolled over from year to year, generally the account contributions stay with an employer if an employee leaves a job. Employee contributions are not possible and these accounts do not receive favored tax treatment. HRAs are subject to fewer requirements than HSAs; for example, they do not have to be paired with a high-deductible health plan.

Flexible spending accounts (FSAs) use employee before-tax wages to reimburse various expenses, such as out-of-pocket health care costs and child care—hence, they can be used for

benefits other than health care. An employer creates administrative arrangements to segregate the funds, but generally does not contribute to the account. Since any unused funds disappear at the end of the year, such accounts do not provide consumers any incentive to economize on health care use.[80]

HRAs, FSAs, and Health Promotion. Because HRAs and FSAs cover out-of-pocket health care costs and ancillary and corollary costs, employees can use them to help gain access to clinical preventive services and wellness programs. How these funds are used, within the rules of the accounts, is entirely up to the employee.

F.2 Uptake of Consumer-Directed Health Plans

Surveys indicate growing interest in consumer-directed health plans nationwide, especially in HSAs. At the same time, some research suggests that employers are concerned that the costs of setting up such plans will offset any restraining effect they might have on their health benefit expenditures.[81] Mercer's *2004 National Survey of Employer-Sponsored Health Plans* revealed that one percent of all employers nationwide offered a consumer-directed health plan in 2004, but the proportion increased to 4 percent when looking only at firms with 500 or more employees and 12 percent among firms with 20,000 or more employees. Fourteen percent of employers with 500 or more employees indicated they are likely to offer a consumer-directed health plan in 2005, and 26 percent of *all* firms nationwide are likely to offer one by 2006. The majority of firms sponsoring consumer-directed health plans report that employee reaction has been positive, on the whole.[82]

Interest in HSAs on the part of employers, and their effect on the overall insurance market, are under close scrutiny. Advocates of HSAs argue that these plans will reduce unnecessary health care spending by giving consumers ownership of a portion of the money used to pay for health care. They also argue that HSAs and MSAs help to reduce the ranks of the uninsured by lowering the monthly cost of insurance.[83] Other analysts suspect that the availability of HSAs may lead some employers, particularly small businesses, to drop health care coverage altogether and instead allow their employees to use HSAs to buy into the individual market.[84] They also assert that employers who offer an HSA along with other health plans products might find that their healthier and more affluent employees opt for the HSA over the more comprehensive coverage. This could lead to sicker and older employees remaining in the other health plans, which would in turn lead to higher costs within these plans.[85] Some analysts conjecture that eventually, the upward spiraling costs of the other plans would result in employers dropping them completely.

Mercer's *2003 National Survey of Employer-Sponsored Health Plans* reveals some evidence on both sides of these arguments. Employers nationwide indicated that in their experience, employees who are healthier and paid higher wages are more likely to participate in HSAs. Analysis of actuarial data by Mercer indicates that employees now enrolling in various consumer-directed health plans had costs 27 percent lower than average *before* they enrolled in the consumer-directed plan—adding credence to the concern that healthier people will enroll in HSAs, leaving sicker employees in a firm's other health plans.[86] At the same time, employers asserted that the employees most likely to participate in an HSA are older.

HSAs are still fairly new, so they have only a small portion of the market both nationally and in Washington State. The Kibble & Prentice 2004 survey of 200 Washington State employers found that nine percent of responding firms had implemented an HSA plan and 31 percent planned to implement one by 2005; 30 percent said they did not plan to implement an HSA. According to one recent news report, "nearly all carriers in this market have come out with health plans accompanied by HSAs or something similar: Premera Blue Cross, Regence BlueShield, KPS Health Plans, Cigna HealthCare, Aetna, and PacifiCare of Washington."[87] For example, Regence BlueShield offers the Preferred Catastrophic Plan; Premera Blue Cross offers Personal Dimensions™; Premera-affiliate Lifewise Healthplan of Washington offers Share HSA™; and KPS Health Plans offers the Healthy Investor™.

F.3 Other New Insurance Products in Washington with Health Promotion Components

Insurers in Washington and elsewhere are beginning to create several new insurance products in response to increased demand for more flexible plans that help employers lower costs—or constrain their growth. Many products are new forms of the preferred provider organization, or PPO. For example, Premera BlueCross' *Premera Dimensions*, launched in June 2002, is a health plan that provides both the employer and enrollees a series of choices regarding physician networks, benefits, and care management/facilitation.[88] The product supports cost-containment efforts by charging higher rates for more coverage, wider networks, and looser care management procedures, and lower rates for more restricted coverage, networks, and procedures. The product also includes health promotion components that are available only to employers whose employees select the plan. These include *My Healthy Advantage*, an online health information site that includes preventive guidelines, wellness information, and personal risk assessments.

Regence BlueShield launched the *FourFront* plan in 2004. It charges enrollees at a higher rate after four health care office visits have been completed. Preventive services are covered and are not counted against the first-four-visits limit and are not subject to a deductible. The cost of other procedures rises after a certain dollar figure is reached (for example, $500 for diagnostic or x-ray services). Smoking cessation is available with a 25 percent deductible.[89] Regence also offers other health promotion services that may aid prevention, including discounts for fitness club memberships.[90]

Summary and Implications for Employment-Based Prevention of Chronic Disease

Whether an employee in Washington State has access to health insurance varies by industry type, firm size, and certain employment characteristics, such as whether they are in the public or private sector; work full or part-time; are temporary, non-temporary, or seasonal employees; and whether they belong to a union. The most important variable appears to be full or part-time employment: 76 percent of all firms offer health insurance benefits to full-time employees, compared to 26 percent to part-time employees. Nine industry sectors, such as finance and insurance, public administration, and professional, scientific, and technical services, have offer rates to full-time employees of 90 percent or better. And firms with 50 or more employees have offer rates of 94 percent or better. Even the smaller firms have offer rates to their full-time employees of between 72 and 83 percent.

Data collected for Section II, *Employees and Employment*, indicate that in 1998, approximately 79 percent of the labor force was employed in a full-time job (see Table 9, p. 28). Although this proportion might have changed since 1998 (in either direction) this high starting point would suggest that firms with a high proportion of full-time employees are an appropriate first focus for assistance in designing and implementing health promotion benefits, policies, and programs. Other selection criteria would include firms with at least 50 or more employees (which account for 59 percent of all employees in the state) that are within the group of industrial sectors with high health benefit offer rates. A prime focus would be firms with 1,000 or more employees, which account for 17 percent of all employees in the state.

Employers in Washington State are struggling with rising health benefit costs. To reduce or at least constrain these costs many are shifting at least some of the burden to their employees through higher premiums, deductibles, and cost-sharing. Some are reducing the benefits they offer, particularly prescription drug coverage, and some are reducing or dropping retiree health insurance coverage altogether. Any discussions with employers about new or different health-related benefits of any sort, including health promotion activities, will need to consider and address these cost concerns.

Part I References

1 The CDC reports BRFSS data annually on its Web site; see www.cdc.gov/brfss/. The WA State Dept of Health also provides summaries of the state data on its Web Site—see www.doh.wa.gov/Data/data.htm—and in other formats to researchers, on request.

2 The U.S. does not have an upper age limit for the definition of *working age*. See, for example: www.bls.gov/bls/demographics.htm (introductory paragraph). In this study, we focus primarily on the working-age population under age 65.

3 See www.cdc.gov/brfss.

4 National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention. *Chronic Disease Overview*. www.cdc.gov/nccdphp/overview.htm.

5 NCQA. *The State of Managed Care Quality, 2001: The Business Case for Health Care Quality.* www.ncqa.org/somc2001/BIZ_CASE/SOMC_2001_BIZ_CASE.html.

6 Goetzel RZ, Long SR, Ozminkowski RJ, Hawkins K, Wang S, and W Lynch. Health, absence, disability, and presenteeism cost estimate of certain physical and mental health conditions affecting U.S. employers. *Journal of Occupational and Environmental Medicine* 46(4) April 2004: 398-412.

7 Center for Health Statistics, WA State Dept. of Health. *Mortality Table C3. Leading Causes by Age Group and Sex for Residents, 2003*. www.doh.wa.gov/ehsphl/chs/chs-data/death/dea_VD.htm.

8 WA State Dept. of Health, Center for Health Statistics. *Mortality Table C3: Leading Causes by Age Group and Sex for Residents, 2002*. www.doh.wa.gov/ehsphl/chs/chs-data/death/dea_VD.htm.

9 WA State Dept. of Health, Center for Health Statistics. *Mortality Table D2: Cancer by Primary Site by Sex for residents, 2003.* www.doh.wa.gov/ehsphl/chs/chs-data/death/dea_VD.htm.

10 WA State Dept. of Health. *The Washington State Cancer Registry*, on-line database: www3.doh.wa.gov/WSCR/ASP/WSCRQryAS.asp.

11 CDC, Behavioral Risk Factor Surveillance System. 2003. www.cdc.gov/brfss. [The survey question asked, "Have you ever been told by a doctor that you have diabetes?"]

12 CDC, National Center for Chronic Disease Prevention and Health Promotion. *Overweight and Obesity: Economic Consequences.* www.cdc.gov/nccdphp/dnpa/obesity/consequences.htm. Accessed September 2004.

13 See Table3 in: Mokdad AH, Serdula MK, Dietz WH, Bowman BA, Marks JS, and JP Koplan. The spread of the obesity epidemic in the United States, 1991-1998. JAMA 282(16): 1519-22; and Table 2 in: Mokdad AH, Ford ES, Bowman BA, Dietz WH, Vinicor F, Bales VS, and JS Marks. Prevalence of obesity, diabetes, and obesity-related health risk factors, 2001. JAMA 289(1):76-9.

14 WA State Dept. of Health. *BRFSS, Turning Information Into Health: Highlights Washington BRFSS 2002.* www.doh.wa.gov/ehsphl/chs/chs-data/brfss/brfss_homepate.htm

15 *Webster's Online Dictionary, The Rosetta Edition.™* www.websters-online-dictionary.org.

16 CDC. *Fact Sheet: Physical Inactivity and Poor Nutrition Catching up to Tobacco as Actual Cause of Death.* www.cdc.gov/od/oc/media/pressrel/fs040309.htm.

17 Mokdad AH, Marks JS, Stroup DF, and JL Gerberding. Correction: Actual causes of death in the United States, 2000 (Letter). *JAMA* 293(3): 293. See also: Mokdad AH, Marks JS, Stroup DF, and JL Gerberding. Actual causes of death in the United States, 2000. *JAMA* 291(10):1238-1245.

18 WA State Dept. of Health. April 8, 2004. *Almost half of all deaths in Washington are preventable.* Press Release.

19 WA State Dept. of Health. *The Health of Washington State, 2002: Nutrition.*

20 See, for example, www.cdc.gov/nccdphp/dnpa/5aday/faq/importance_4.htm.

21 WA State Dept. of Health, 2002/2004. *The Health of Washington State, 2002* and *2004 Supplement: Coronary Heart Disease.*

22 WA State Dept. of Health. *The Health of Washington State, 2002 and 2004 Supplement*. www.doh.wa.gov/HWS/CD.shtm.

23 USPSTF, *Guide to Clinical Preventive Services, Second Edition*. International Medical Publishing, Inc., 1996. www.ahrq.gov/clinic/uspstfix.htm.

24 Nichol KL, Nordin J, Mullooly J, Lask R, Fillbrandt K, and M Iwane. Influenza vaccination and reduction in hospitalizations for cardiac disease and stroke among the elderly. *N Engl J Med* 348(14) Apr 3 2003: 1322-32.

25 Publication available at www.prevent.org. The document was based on: Coffield AB, Maciosek MV, McGinnis JM, Harris JR, Caldwell MB, Teutsch SM, Atkins D, Richland JH, and A Haddix. Priorities among recommended clinical preventive services. *American Journal of Preventive Medicine* 21(1): 1-9.

26 Bondi MA, Harris JR, Atkins D, French ME, and B Umland. Employer coverage of clinical preventive services in the United States. *American Journal of Health Promotion* (in press).

27 CDC. 2003. Prevention and control of influenza: Recommendations of the Advisory Committee on Immunization Practices. *MMWR* 52(RR08) 2003: 1-36. www.cdc.gov/mmwr/preview/mmwrhtml/rr5208a1.htm.

28 U.S. Dept. of Health and Human Services. 1998. *Clinician's Handbook of Preventive Services,* 2nd ed. www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat6.section.6193.

29 WA State Dept. of Health. Oct 21, 2004. *Number of adult smokers in Washington takes a healthy drop.* Press Release. www.doh.wa.gov/Publicat/2004_news/04-123.htm.

30 WA State Dept. of Health, November 2004. *Helping People Quit*. Fact Sheet. www.doh.wa.gov/Tobacco/fact_sheets/factquit.htm.

31 NCQA. 2004. *The State of Health Care Quality: 2004.* Washington, DC. www.ncqa.org.

HEDIS® (the Health Plan Employer Data and Information Set) is a set of standardized performance measures designed by the National Committee for Quality Assurance to provide information that health benefits purchasers and health care service consumers can use to compare the performance of managed health care plans. NCQA is a national not-for-profit organization dedicated to improving health care quality.

32 The survey question asked, "About how long has it been since you last had your blood pressure taken by a health professional?" [See CDC, Behavioral Risk Factor Surveillance System. www.cdc.gov/brfss.]

33 See www.nhlbi.nih.gov/guidelines/hypertension/jncintro.htm.

34 WA State Dept. of Health, 2002/2004. *The Health of Washington State, 2004 Supplement: Coronary Heart Disease.*

35 WA State Dept. of Health, 2002. *The Health of Washington State: Invasive Cervical Cancer.*

36 WA State Dept. of Health. 2002. *The Health of Washington State: Diabetes.*

37 WA State Dept. of Health, 2004. *The Health of Washington State, 2004 Supplement: Stroke.*

38 WA State Dept. of Health, 2002/2004. *The Health of Washington State, 2004 Supplement: Coronary Heart Disease; Invasive Cervical Cancer; Colorectal Cancer.*

39 WA State Dept. of Health. 2002. *The Health of Washington State: Lung Cancer.*

40 WA State Dept. of Health. 2002. *Tobacco and Health in Washington State: County Profiles of Tobacco Use.*

41 WA State Dept. of Health, Center for Health Statistics. *Mortality Table D3: Cancer for Total All Sites, Lung, ad Colo-Rectal by County of Residence, 2003.* www.doh.wa.gov/ehsphl/chs/chs-data/death/dea_VD.htm. (Includes data for 2002 and 2001.)

42 WA State Office of Financial Management, June 2004. *The 2004 Long-Term Economic and Labor Force Forecast for Washington, Chapter 2: Long-Term Forecast of the Washington Labor Force.* www.ofm.wa.gov/economy/longterm/2004/index.htm.

43 WA State Office of Financial Management, June 2004. *The 2004 Long-Term Economic and Labor Force Forecast for Washington, Chapter 3: Long-Term Forecast of Washington Wage and Salary Employment.* pp. 4; 17-18. www.ofm.wa.gov/economy/longerm/2004/index.htm.

44 WA State Employment Security Dept. June 2004. *Agricultural Workforce in Washington State 2003*. www.workforceexplorer.com/article.asp?ARTICLEID=2827.

45 WA State Employment Security Dept. *2003 Washington State Labor Market and Economic Annual Report*. www.workforceexplorer.com.

46 WA State Employment Security Dept. 2004. *2004 Washington Labor and Economic Annual Report*. www.workforceexplorer.com/article.asp?ARTICLEID=3954&PAGEID=&SUBID=

47 WA State Employment Security Dept. March 2004. *Washington State 2003 Employee Benefits Survey*. p. 6. www.workforceexplorer.com/article.asp?ARTICLEID=2180.

48 Chris Thomas, WA State Employment Security Dept. Personal communication September 2004.

49 Scott Bailey, WA State Employment Security Dept. *Washington Wage Report, 1990-2002.*

50 WA State Employment Security Dept. *2003 Washington State Labor Market and Economic Annual Report.* www.workforceexplorer.com.

51 US Dept. of Labor, Bureau of Labor Statistics. *Most Requested Statistics.* www.bls.gov/ces/home.htm#overview (specifically: http://data.bls.gov/cgi-bin/surveymost?ce).

52 The Kaiser Commission on Medicaid and the Uninsured. September 2004. *Health Insurance Coverage in America: 2003 Data Update Highlights/Chartpack and Tables*.

53 WA State Office of Financial Management. January 2005 *(personal communication).* Data from the 2004 State Population Survey, v2M.

54 Gabel J, Claxton G, Gil I, Pickreign J, Whitmore H, Holve E, Finder B, Hawkins S, and D Rowland. Health Benefits in 2004: Four years of double-digit premium increases take their toll on coverage. *Health Affairs* 23(5) Sept./Oct. 2004: 200-209.

55 See, for example, Mercer Human Resource Consulting. July 2004. "Surprise slow-down in US health benefit cost increase," Press Release; Mercer Human Resource Consulting, November 2004. "US health benefit cost rises 7.5% in 2004, lowest increase in five years," Press Release; and Center for Studying Health System Change, *Employers Shift Rising Health Care Costs to Workers: No Long-Term Solution in Sight,* Issue Brief No. 83, May 2004.

56 Kaiser Family Foundation, Health Research Educational Trust. *Employer Health Benefits 2004 Annual Survey* and *2003 Annual Survey*. www.kff.org.

57 Kibble & Prentice. July 14, 2004. "Kibble & Prentice Releases Findings of Annual Employer Survey - Finds Increase in Costs, Decrease in Benefits and Transfer of Burden to Employees," Press Release. www.kpcom.com/aboutus/survey.asp.

58 Mercer Human Resource Consulting. November 18, 2004. "US health benefit cost rises 7.5% in 2004, lowest increase in five years," Press Release based on *2004 Mercer US National Employer-Sponsored Health Plans Survey.* www.mercerhr.com/ushealthplansurvey.

59 Mercer Human Resource Consulting, *2000 Survey of Employer Sponsored Health Plans*, U.S., Washington and Western U.S. data. Washington state sample size was 48.

60 Kaiser Family Foundation and Hewitt Associates. December 2004. *Current Trends and Future Outlook for Retiree Health Benefits: Findings from the Kaiser/Hewitt 2004 Survey on Retiree Health Benefits.* www.kff.org/medicare/loader.cfm?url=/commonspot/security/getfile.cfm&PageID=49652. See also: Neumann, P, Kaiser Family Foundation. "The State of Retiree Health Benefits: Historical Trends and Future Uncertainties." Testimony before the May 17, 2004 Special Committee on Aging, U.S. Senate.

61 Pear R. July 14, 2004. "Medicare law is seen leading to cuts in drug benefits for retirees," *New York Times*.

62 US Dept. of Health & Human Services. January 21, 2005. "HHS takes major step to prescription drug benefit," Press Release. www.hhs.gov/news/press/2005pres/20050121.html. See also Kaiser Family Foundation Medicare Fact Sheet. *The Medicare Prescription Drug Law*, March 2004. www.kff.org/medicare/loader.cfm?url=/commonspot/security/getfile.cfm&PageID=33325.

63 See, for example, *BenefitNews Adviser*. July 28, 2004. "Many believe Medicare regs will make retiree coverage affordable." www.benefitnews.com/law/detail.cfm?id=6271.

64 Kaiser Family Foundation and Hewitt Associates. December 2004. *Current Trends and Future Outlook for Retiree Health Benefits: Findings from the Kaiser/Hewitt 2004 Survey on Retiree Health Benefits.* www.kff.org/medicare/loader.cfm?url=/commonspot/security/getfile.cfm&PageID=49652.

65 US Dept. of Health & Human Services, Centers for Medicare & Medicaid Services. *Preventive Services Start Now!* Link on www.medicare.gov/health/overview.asp. See also *HHS Promotes New Medicare Preventive Benefits for Better Senior Health*. Press Release, January 10, 2005. www.hhs.gov/news/press/2005pres/20050110.html.

66 Ford and Harrison LLP. April 23, 2004. *EEOC Issues Final Rule Exempting Retiree Health Plans from ADEA Coverage*. www.fordharrison.com/fh/news/articles/20040423no_adea_retiree.asp. See also www.eeoc.gov/policy/regs/retiree_benefits.html.

67 WA State Office of the Insurance Commissioner. *2003 Insurance Annual Report for Washington State*.

www.insurance.wa.gov/publications/annualreports/2003ReportAppendix/2003overall.asp See also: WA State Hospital Assn. *Profile of Washington Health Plans, 2004.* Available www.wsha.org/fastfacts.htm.

68 *Puget Sound Business Journal*. July 30-August 5, 2004. "Health Insurers: The largest in Washington state. Ranked by Washington insured enrollment." pp. 28; 30. From *The Book of Lists.* www.bizjournals.com/seattle/contactus/bookoflists.html.

69 *Puget Sound Business Journal*. September 3-9, 2004. "Insurance Brokerages: The largest in the Puget Sound area." Accessed http://seattle.bizjournals.com/seattle/stories/2003/09/08/list.html.

70 See the *Glossary* in this report for a more complete definition of both terms and their reference citations.

71 Health Policy Analysis Program. 2002. *Potential Regulation of Third Party Administrators*. Prepared for the Washington State Office of the Insurance Commissioner.

72 Kaiser Family Foundation, Health Research Educational Trust. *Employer Health Benefits 2003 Annual Survey.* www.kff.org.

73 Kaiser Family Foundation, Health Research Educational Trust. *Employer Health Benefits 2004 Annual Survey*. www.kff.org.

74 WA State Employment Security Dept. March 2004. *Washington State 2003 Employee Benefits Survey*. pp 17-18. www.workforceexplorer.com/article.asp?ARTICLEID=2180.

75 Alexander K, Employee Benefits Institute of America. June 23, 2004. *A Primer on Health Savings Accounts (HSAs).* Presentation. See also: Lichiello P. *Health Savings Accounts: Opportunities and Trade-Offs.* Briefing Paper No. 7. University of Washington Health Policy Analysis Program. www.hpap.washington.edu.

76 U.S. Dept. of the Treasury, Internal Revenue Service. *Notice 2004-23.* www.ustreas.gov/press/releases/reports/notice200423.pdf or www.irs.gov/newsroom/article/0,,id= 97322,00.html.

77 U.S. Dept. of the Treasury, Internal Revenue Service. *Notice 2004-50.* www.irs.gov/newsroom/article/0,,id=97322,00.html.

78 For an updated list of all Dept. of Treasury technical guidance notices on HSAs, see www.treas.gov/offices/public-affairs/hsa/technical-guidance/.

79 U.S. Dept. of the Treasury, Internal Revenue Service. *Notice 2004-50.* www.irs.gov/newsroom/article/0,,id=97322,00.html.

80 Council for Affordable Health Insurance. March 2004. *Issues and Answers, HSAs, HRAs, or FSAs: Which Consumer-driven health care option should you choose?*, Newsletter No. 124.

81 Trude S and L Conwell. July 2004. *Rhetoric vs. Reality: Employer Views on Consumer-Driven Health Care.* Issue Brief No. 86. Center for Studying Health System Change, Washington, DC.

82 Mercer Human Resource Consulting. November 18, 2004. "US health benefit cost rises 7.5% in 2004, lowest increase in five years," Press Release based on *2004 Mercer US National Employer-Sponsored Health Plans Survey.* www.mercerhr.com/ushealthplansurvey.

83 Nadler R and D Perrin. May 25, 2004. *The Center for Budget and Policy Priorities' Study on HSA Premium Tax Deduction Misses the Point.* The HSA Coalition.

84 Park E and Greenstein R. May 10, 2004. *Proposal for new HSA tax deduction found likely to increase the ranks of the uninsured*, Center on Budget and Policy Priorities.

85 Shearer G. February 25, 2004. "Impact of 'Consumer-Driven' Health Care on Consumers." Testimony before the U.S. Congress Joint Economic Committee.

86 Trieselmann R, Mercer Human Resource Consulting. June 23, 2004. *Health Savings Accounts (HSAs) – Opportunities and Trade-offs.* Presentation.

87 Neurath P. June 28, 2004. "Consumer accounts are changing health insurers." *Puget Sound Business Journal.*

88 Premera Blue Cross. *Premera Blue Cross Fact Sheet: Key Components of Premera Dimensions™.* www.premera.com. See also: *History: The Premera Blue Cross Story*. www.premera.com.

89 Regence BlueShield. *Summary of Benefits: Preferred Plan FourFront.* (1-03) www.wa.regence.com/broker/product/docs/2003/fourFrontSummary.pdf. For updated information, see www.wa.regence.com/employer/plan/fourFront/summary/index.html.

90 Regence BlueShield. *Regence Advantages: Fitness Club Program*. www.wa.regence.com/employer/advantages/fitness/index.html.

Part II: Employment-Based Health Promotion Activities in Washington State – Literature Review

To be most effective at providing health promotion assistance to Washington State employers requires basic knowledge about the specific activities they currently offer, whether as part of a health insurance benefit, a workplace policy, or a workplace program. These employer practices can then be compared against the current thinking about evidence-based best practices in health promotion activities.

I. Research Approach

To begin building a foundation of knowledge about the health promotion activities of employers in Washington State, we conducted an introductory literature search and review in response to the question:

> *What is published in the research or grey literature, or is readily available via the Internet, that describes the health promotion activities of employers in Washington State?*

We then compared our findings against evidence from three national organizations that have conducted systematic, evidence-based reviews to develop health promotion *best practices*. For this study, we defined *best practices* as techniques or methods that, based on experience and research, have proven to reliably lead to a desired result.[1] For more information on our research methods, see Appendix A.

Two of the sources for health promotion best practices offer evidence on *what* to promote—that is, which health behaviors, including health-related lifestyles and clinical preventive services:

- The U.S. Preventive Services Task Force (USPSTF): *Guide to Clinical Preventive Services*. The USPSTF is an independent panel of experts administered by the federal Agency for Health Care Research and Quality. The panel systematically reviews evidence of the effectiveness of clinical preventive services and issues recommendations for their appropriate application in health care settings, particularly primary care providers' offices.[2] †

Activities Fast Facts

- Nationally, employer-sponsored health insurance coverage is low for several key clinical preventive services aimed at reducing chronic diseases, including colorectal cancer screening, influenza vaccination, and tobacco cessation counseling and medications.
- Three expert sources offer best practices in health promotion activities: the U.S. Preventive Services Task Force's *Guide to Clinical Preventive Services*; the Partnership for Prevention's *Prevention Priorities: Employers' Guide to the Highest Value Preventive Health Services*; and the Task Force on Community Preventive Services' *Guide to Community Preventive Services.*
- Larger employers in Washington State appear to have more resources for purchasing health promotion programs. Smaller employers, possibly with fewer resources, appear to be developing their own creative health promotion efforts.
- Because very little information is publicly and readily available on Washington State employer health promotion activities, the best source for such information is the employers themselves.

† Also see Part I, pp. 16-19 for more information on this source.

- The Partnership for Prevention: *Prevention Priorities: Employers' Guide to the Highest Value Preventive Health Services*. The Partnership for Prevention is a not-for-profit organization that focuses on preventive health care practices of employers. Its *Prevention Priorities* reports on the Partnership's ranking of 30 USPSTF-recommended clinical preventive services, evaluated for their health impact and cost effectiveness.[3] †

The third source offers evidence on *how* to promote health behaviors:

- The Task Force on Community Preventive Services: *Guide to Community Preventive Services* (the *Community Guide*). The Task Force on Community Preventive Services is an independent panel of experts administered by the federal Centers for Disease Control and Prevention (CDC). The *Community Guide* systematically reviews the evidence and provides recommendations for population-based interventions to promote health and prevent disease, injury, disability, and premature death. The recommendations are targeted to communities and health care systems, though some are specific to the workplace and many more are applicable there. To date, the *Community Guide* has produced recommendations on five topics related to chronic disease prevention:[4]
    - Cancer
    - Obesity
    - Physical activity
    - Tobacco
    - Vaccination

II. Research Findings

Currently, employers who implement health promotion activities have no standard defined program configurations or templates to which to turn. In the absence of such a tool, employer activities vary considerably across industries and by firm size, location, and workforce demographics. They also reflect the health insurance products, health care providers, and health promotion programs available in any given location, as well as employers' knowledge about these resources. Employer efforts generally organize into three categories:

- Health Insurance Benefits. Employee health insurance benefits that include coverage of preventive care services, particularly clinical preventive services.
- Workplace Policies. Defined as workplace-specific actions initiated and implemented by employers, such as maintaining a smoke-free workplace or posting stair-use reminders next to elevators.
- Workplace Programs. Defined as external products or activities employers adopt or purchase for their employees' use. For example, an employer might adopt a Web-based program to promote and track physical activity, or purchase gym memberships for employees.

Our research revealed that employers nationally and in Washington State could do much

† Also see Part I, pp. 16-19 for more information on this source.

better at implementing health promotion best practices in each of these three categories. The four sections below summarize the evidence on best practices in each category—employment-based benefits, policies, and programs—and describe our research findings on implementation of these practices nationwide and in Washington State.

A. Health Insurance Benefits

A.1 Best Practices

Cover Recommended Clinical Preventive Services in Health Insurance Benefits

The first step in promoting employees' use of clinical preventive services is to cover the services within a health insurance benefit. The *Guide to Clinical Preventive Services* and *Prevention Priorities: Employers' Guide to the Highest Value Preventive Health Services* offer recommendations that, taken together, provide guidance on which clinical preventive services to include in such a benefit.[‡] The USPSTF recommends eight services specifically aimed at reducing chronic disease among average-risk, working-age adults. Seven—the exception being obesity screening—received the highest *Prevention Priorities* ranking, as measured by health outcomes and cost effectiveness, among the 30 services evaluated. All eight are listed below, in priority order. Those that *Prevention Priorities* also identified as being cost-*saving* are indicated in italics:

- *Tobacco cessation counseling and medications*
- Cervical cancer screening
- Colorectal cancer screening
- High blood pressure screening
- *Influenza vaccination*
- Cholesterol screening
- Breast cancer screening
- Obesity screening

These eight clinical preventive services offer employers and employees significant gains in employee health, restrained health care expenditures, and increased productivity.

Eliminate Cost-Sharing, Institute Reminder Systems, and Assess and Offer Feedback

The *Community Guide* offers three best practices for the design of a health insurance benefit, each of which promotes the use of clinical preventive services recommended by the USPSTF. These best practices are targeted to health plans, providers, and employers:

- Eliminate, or reduce as much as possible, patient cost-sharing for clinical preventive services.
- Institute systems to remind both patients and providers when clinical preventive services are due.

[‡] Part I of this report provides a more detailed description of these recommendations; see pp. 16-19.

- Assess the provision of clinical preventive services by health care providers and offer feedback.

In some cases, the *Community Guide* recommends a best practice specifically for certain clinical preventive services. This does not mean that the practice is not effective for other clinical preventive services, but instead that the task force that prepares the *Community Guide* has determined that there is not yet sufficient evidence to ascertain the effectiveness of the service, or the task force has not yet examined the existing evidence.[†] In either case, the practice could very well be effective and thereby merits consideration by employers.

Eliminate or Reduce Patient Cost-Sharing for Clinical Preventive Services. The research literature indicates that patient cost-sharing—including co-payments, co-insurance, and deductibles—is a significant barrier to use of clinical preventive services, and that reducing or eliminating cost-sharing results in increased use of many services.[5, 6, 7] Based on an extensive review of the literature for specific clinical preventive services, the *Community Guide* recommends reducing or eliminating patient out-of-pocket expenses for breast cancer screening,[8] vaccinations,[9] and tobacco cessation treatment.[10]

Out-of-pocket expenditures for tobacco cessation are a unique case in that most nicotine-replacement medications are available only over the counter, as opposed to via prescription. These medications are an integral part of the tobacco cessation clinical preventive service, which is defined by the USPSTF as counseling *combined with* medications.[11] Because over-the-counter medications are less often covered under a health insurance benefit, employers would need to interpret the *Community Guide* recommendation broadly to find a way to cover their employees' medication expenditures. Employers that offer a health insurance benefit could simply require that their health plans cover over-the-counter tobacco cessation medications.

Institute Systems to Remind Patients and Prompt Providers. The research literature indicates that sending patients preventive care service reminders, such as letters or postcards, increases their use of these services.[12] The *Community Guide* recommends sending client reminders for breast, cervical, and colorectal cancer screening and for vaccinations.

The *Community Guide* also recommends prompting health care service providers about identifying and discussing the importance of quitting with their tobacco-using patients. The *Guide* found that combining provider prompts with provider education and patient self-help materials is even more successful at increasing the number of patients who receive advice from their provider on quitting tobacco use. Prompts can be sent by a variety of organizations, such as health systems, health plans, physician training programs, and public health clinics.

Assess Provision of Clinical Preventive Services by Health Care Providers and Offer Feedback. The *Community Guide* recommends retrospectively evaluating the performance of health care providers in delivering vaccination services and sharing this information with the providers. The research literature indicates that assessment and feedback can result in improved

[†] Please see the *Community Guide* for an explanation of the recommendation rationale: www.thecommunityguide.org.

vaccination coverage by changing provider knowledge, attitudes, and behaviors, or by stimulating change in the way the provider manages the administrative aspects of delivering vaccinations (for example, initiating sending service reminders to patients).

A.2 National and Washington State Implementation of Benefits Best Practices

Cover Recommended Clinical Preventive Services in Health Insurance Benefits

National Implementation. The *Mercer 2001 National Survey of Employer-Sponsored Health Plans* found that nationally, many employers cover at least some clinical preventive services in their employee health plans (Table 20). But coverage of services that *Prevention Priorities* found to be high-value and high-impact is often quite low. The Mercer survey found, for example, that only 68 percent of all employers who offer health insurance cover colorectal cancer screening, 55 percent offer influenza vaccination, and 10 percent tobacco cessation counseling combined with prescription medication.[13]

The literature indicates that some employers cover various other health promotion services within their employee health insurance benefit: for example, lifestyle modification services, disease management programs, and health care help lines. But the Mercer national survey found that well under 20 percent of employers cover three common lifestyle modification services through their primary—that is, most popular—health plan: nutrition counseling, weight-loss management, and physical activity counseling.[13]

Washington State Implementation. We were unable to find research literature that described whether and to what extent Washington State employers cover clinical preventive services in their health insurance benefits, particularly services targeted to adults. We reviewed the Web sites of a selection of small (1-249 employees), medium (250-999), and large (1,000 or more)

Table 20. National Employer Coverage of High-Value, High-Impact Clinical Preventive Services for Average- Risk, Working-Age Adults, 2001

	Small* Employers (10-199)	Medium* Employers (200-999)	Large* Employers (1,000+)	Employer Primary Plan
Screening				
Cholesterol Screening	62%	66%	77%	57%
Cervical Cancer Screening	85%	90%	92%	79%
Colorectal Cancer Screening	73%	76%	78%	68%
Immunization				
Influenza Vaccination	60%	58%	68%	55%
Counseling				
Tobacco Cessation Counseling and Rx Medications	11%	13%	9%	10%

*Note: Employer size is based on the number of employees on staff, indicated in parentheses. For each size category, the number of employers responding to the survey was: small – 600; medium – 506; large – 1,074.

Source: Data were collected by William M. Mercer, Inc. as part of its *National Survey of Employer-Sponsored Health Plans, 2001*. They are based on responses from just over 2,000 employers and have been generalized to represent over 884,000 U.S. employers who sponsor an employee health insurance benefit and have a staff of at least 10 employees. The data are based on each employer's most popular health plan (*primary plan)* for three types of plans: HMO, PPO, and POS. The most popular plan is the plan with the highest employee enrollment.

Washington State employers for any indication that their health insurance benefits included preventive care services, specifically clinical preventive services. We also searched for a listing or description of other kinds of health promotion benefits, policies, or programs they offered. (See Appendix A for a description of our research methods.) Table 21 (p. 79) lists the employers in our sample that at the time of our research offered: 1) preventive care services of any kind within their health insurance benefits, 2) other health promotion or wellness policies or programs, or 3) both. Whenever an employer offered health promotion policies or programs *and also* offered health insurance, this is noted in Table 21 whether or not we could ascertain the extent to which the health insurance benefit included preventive care.

Table 21 illustrates that the Web-based information we found most often did not mention "preventive care" or list the types of services a health insurance benefit covered. Some employers, such as the Association of Washington Cities, indicated simply that they offer "comprehensive medical coverage." Some large employers, such as Microsoft, Weyerhaeuser, and the University of Washington, were more specific about offering preventive care services.

The information we found also in part confirms that for large national and multi-national corporations—such as Boeing, Microsoft, and Weyerhaeuser—worksite location can have a strong influence on the health plans and types of providers available to the company and its employees. The presence of both union and non-union employees also can translate into different types of health care coverage for different employees. Boeing, for example, notes that it in many areas of the country it offers three medical plans to its non-union employees. These plans include some preventive care services, which either are covered completely by Boeing or require a "small copayment."[14]

Eliminate Cost-Sharing, Institute Reminders and Prompts, and Assess and Offer Feedback

At the time of our research and with the methods we employed, we were unable to find national or Washington State data or information on employer practices regarding eliminating or reducing cost sharing, providing patient reminders and provider prompts, and providing provider assessment and feedback.

B. Workplace Health Promotion Policies

B.1 Best Practices

Policies Recommended in the *Community Guide*

The *Community Guide* offers four policies that can be applied in the workplace to promote tobacco avoidance, physical activity, and use of clinical preventive services:

- Implement smoking bans or restrictions at the workplace.
- Create or enhance access to places for physical activity and provide informational outreach.
- Post stair-use reminder language (also known as *point-of-decision prompts*) to encourage physical activity.
- Reduce barriers and enhance access to clinical preventive services.

These policy best practices are recommended to promote specific health-related lifestyles or use of specific clinical preventive services. Yet as with all *Community Guide* best practices, the absence of a recommendation for use, or an indication of *insufficient evidence* does not mean a particular policy is not effective for a particular service: only that either there is insufficient evidence as yet, or that the *Community Guide* task force has not yet evaluated the evidence for this health-related lifestyle. Policies that are effective for one health-related lifestyle may well be applicable to another.

Implement Smoking Bans or Restrictions at the Workplace. Based on its review of the literature, the *Community Guide* recommends that smoking bans and restrictions be put in place in appropriate settings such as workplaces and other public areas. The main effect of workplace smoking bans and restrictions is to limit exposure of non-smoking employees to environmental (secondhand) tobacco smoke. Bans and restrictions also may encourage tobacco cessation. The *Community Guide* defines smoking bans and restrictions as:

> *Policies, regulations and laws that limit smoking in workplaces and other public areas. Smoking bans prohibit smoking entirely; smoking restrictions limit smoking to designated areas.*[15]

Create or Improve Access to Places for Physical Activity and Provide Informational Outreach. The *Community Guide* recommends that businesses, coalitions, agencies, and communities create or improve access to places where people can be physically active. This can include, for example, providing access to walking trails or to fitness equipment in nearby fitness or community centers, or creating in-house health and fitness programs. For best effect, these efforts should be combined with informational outreach, such as training, seminars, workshops, risk screening, and counseling.

Post Stair-Use Reminder Language (or Point-of-Decision Prompts). The *Community Guide* recommends placing signs by elevators and escalators to motivate people to use nearby stairs. The *Guide* notes that these point-of-decision prompts appear to motivate people who want to be more active, as well as people interested in the general health benefits of using stairs. Point-of-decision prompts work best when adapted to the target population.

Reduce Barriers and Enhance Access to Clinical Preventive Services. In several places the *Community Guide* offers additional recommendations that employers could adopt or support to remove barriers and enhance access for employees seeking clinical preventive services. The recommendations are specific to certain services but are not contra-indicated for others. They include, for example:

- Reducing structural barriers to breast and colorectal cancer screening. Structural barriers include screening location, hours of operation of the screening facility, and availability of child care.
- Standing orders for adult vaccination. Standing orders allow non-physician health care providers, such as nurses and pharmacists, to administer vaccinations using an approved protocol without the direct involvement of a physician. They remove two administrative barriers to vaccination: the patient needing a physical examination in order to receive

vaccination and demands on the physician's time. Evidence indicates that standing orders are particularly effective for influenza vaccination. They can be used in a variety of settings, such as inpatient and outpatient health care facilities, pharmacies, and workplaces. The CDC's Advisory Committee on Immunization Practices encourages implementing standing orders for adult influenza vaccination in various settings, including the workplace.

B.2 National and Washington State Implementation of Policy Best Practices

Policies Recommended in the *Community Guide*

Implement Smoking Bans or Restrictions at the Workplace. The National Cancer Institute reports that in 1997, 54 percent of white-collar workers nationwide were covered by a smoke-free policy in the workplace, compared with 35 percent of blue-collar workers.[16] In Washington State, between 1989 and 1990 eighty percent or more of employed men and women were subject to smoking restrictions at their workplace. Whether employers had a smoking policy and the level of restrictiveness it carried varied by firm size, type of firm, and location. Firms with fewer than 10 employees, for example, were more likely to be without a smoking policy. Whether employees worked in a smoke-free workplace also was related to the type of job they held; for example, white-collar professionals, clerical workers, and women working in sales were more likely to work under a no-smoking policy.[17]

We found a small number of employers in our research sample that had smoke-free workplace policies (see Table 21). For example, the University of Washington prohibits smoking in all university buildings on all three campuses; within university vehicles; and in close proximity to building entrances and air intakes.

Create or Improve Access to Physical Activity, Post Stair-Use Reminders, and Reduce Barriers. At the time of our research and with the methods we employed, we were unable to find national data or information on employer practices regarding creating or improving access to opportunities for physical activity, posting stair-use reminders, and reducing barriers to cancer screening and vaccination. We did find a small number of employers in our research sample that had physical activity policies. For example, Starbucks offers a cash subsidy or free membership at the on-site gym for employees who bike or walk to work at the head-quarters office.

C. Workplace Health Promotion Programs

C.1 Best Practices

The *Community Guide* recommends five best practices for health promotion programs designed to increase physical activity, decrease obesity, and increase tobacco cessation. Not all of these have been tested in the workplace, but all could be applied there:

- Conduct community-wide communication campaigns that employ multiple approaches to promote increasing physical activity.
- Implement individually-adapted group programs to increase physical activity.

- Implement multi-component programs aimed at increasing physical activity and healthy eating to control overweight and obesity.
- Provide tobacco cessation telephone quit lines combined with other cessation interventions.
- Expand access to influenza vaccination.

Conduct Community-Wide Communication Campaigns to Promote Increasing Physical Activity

The *Community Guide* recommends conducting community-wide campaigns to increase adult physical activity. These campaigns involve various sectors of the community collaborating on multiple communication approaches—including, for example, television, radio, newspapers, direct mail, billboards, and transit station posters. In thinking specifically about the workplace, employers could apply this approach to a firm-wide, multiple-approach information campaign. The *Community Guide* notes that most of the campaigns it evaluated were combined with other health promotion components designed to support increased physical activity, such as support groups, counseling, and education at worksites, schools, and community events.

Implement Individually-Adapted Group Programs to Increase Physical Activity

The *Community Guide* recommends implementing individually-adapted health behavior change programs to increase physical activity. These programs are tailored to participants' specific interests and preferences. They include teaching specific behavioral skills such as setting goals and monitoring progress toward the goals, building social support, reinforcing behavior through self-reward, and maintaining change through structured problem solving.

Implement Multi-Component Programs Aimed at Increasing Physical Activity and Healthy Eating to Control Overweight and Obesity

The *Community Guide* recommends implementing multi-component programs to increase physical activity and healthy eating, with the purpose of controlling overweight and obesity. It recommends that such programs be put in place specifically in the workplace, where adults spend a considerable amount of time. Multi-component programs use multiple, simultaneous strategies to address physical activity and healthy eating. They include various combinations of activities and support, such as prescriptions for targeted exercise, group exercise sessions, behavioral technique training, self-help materials, and nutrition education and dietary guidance. According to the *Guide*, research has found that, on average, people lose between 4 and 26 pounds as a result of their participation in such programs. But follow-up after six months has revealed less positive results, suggesting that weight is often re-gained.

Provide Tobacco Cessation Telephone Quit Lines Combined with Other Cessation Interventions

Research indicates that telephone support in combination with other efforts, such as educational approaches or medical therapies, is effective in helping smokers to quit. The *Community Guide* recommends providing telephone-based counseling and support to people who want to quit smoking as one component of a multi-component approach. Telephone quit lines provide one or more sessions of counseling that usually follow a standardized

approach. Complementary efforts include distribution of materials about quitting, formal individual or group counseling, and over-the-counter nicotine replacement therapies (including patches or gum).

Expand Access to Influenza Vaccination

The *Community Guide* reports that programs that combine expanded access to vaccination services in clinical settings with at least one other activity to support vaccination are effective in increasing vaccination rates. Ways to expand access to vaccination in clinical settings include decreasing the distance between the setting and the people being served, increasing the hours during which vaccination services are provided, delivering vaccinations in clinical settings where they were not previously provided, or reducing administrative barriers to receiving vaccination within clinical settings—for example, by developing "drop-in" clinics or an "express lane" vaccination service. Complementary activities include, for example, patient reminders (see above, p. 68), provider assessment and feedback (see p. 68), and vaccination standing orders (see p. 71), among others.

The Grey Literature reveals that in many parts of the country, influenza vaccination services are being offered to employers through mobile clinics that come to the workplace: either through a vehicle parked at the site or a provider team that sets up a temporary clinic within the workplace. Organizations that offer such services include, for example, health plans, hospitals, and other private-sector health service businesses, among others.[18] This approach supports employers in implementing the *Community Guide* access recommendation.

C.2 National and Washington State Implementation of Health Promotion Program Best Practices

The literature and the Web reveal that employers nationwide and in Washington State, of all types and sizes, are implementing an impressive variety of workplace health promotion programs. Many are implementing the *Community Guide* recommendations in various forms, including individually-adapted group programs and multi-component programs aimed at increasing physical activity and healthy eating, and tobacco cessation telephone quit lines. The Washington State employer Web sites we reviewed revealed a wide range of activities, summarized in Table 21. They include, for example:

- On-site fitness centers or paid health club memberships.
- Lunchtime or break-time walking programs.
- Adoption of the American Cancer Society (ACS) *Active for Life* program.
- Personal development seminars and wellness lectures

Larger companies appear to have more resources for adopting or purchasing the various components of their health promotion programs. At the time of our research, for example, Starbucks' headquarters offered discounts and memberships to fitness centers. Weyerhaeuser offered *Excel*, a worksite wellness program with a focus on nutrition, physical activity, and stress management.[19] Boeing offered *Free & Clear*, a tobacco cessation program. Weyerhaeuser offered the American Cancer Society's *Active for Life* program, a ten-week

wellness program designed specifically for adoption by employers and employees that encourages individuals to be more active on a regular basis.[20]

Smaller companies with fewer resources must by necessity be more creative. For example, at the time of our research Rainier Pacific Bank, headquartered in Tacoma, sponsored a slow-pitch softball team to encourage personal wellness and offered on-site massage every other Friday ("a self-pay program offered to reduce stress"). WRQ, an Internet information management company based in Seattle, offered kayak dock space. Wizards of the Coast, an adventure game company in Renton, offered an on-site dojo (a training hall for the Japanese arts of self defense) and a gym with showers and lockers.

Government employers in Washington State also are offering health promotion programs. The University of Washington, for example, offers *UWellness*, an umbrella program with information and services in support of worksite health, employee health benefits, employee nutrition and fitness, violence prevention, and worksite wellness services. The Association of Washington Cities offers the *AWF Wellness Works* program, which helps member cities implement wellness programs for their employees. *Wellness Works* includes health risk assessments, on-site health screenings, inter-city sports leagues and events, wellness campaigns, and a large variety of wellness programs available to individual municipal governments. The association also gives annual *WellCity Awards* to municipalities that achieve a standard of excellence in employee health promotion. In 2004, the 22 award-winning municipalities ranged from the town of Steilacoom in Pierce County (in western Washington) to the City of Walla Walla in Walla Walla County (in eastern Washington).[21]

D. Other Health Promotion Actions Employers Can Take

Our research focused on employer health insurance benefits and workplace policies and programs that address health promotion. Through this work, we uncovered two additional activities employers can undertake to promote the health of their employees: health promotion communication and tracking employee health behaviors.

D.1 Health Promotion Communication

Communication is a key component of most health promotion programs, but it also is an important umbrella tool employers can use to increase the effectiveness of their health insurance benefits and health promotion policies and programs. Communication can enhance awareness of benefits, policies, and programs, but it also can change the environment of the workplace in a way that affects employees' use of, adherence to, and participation in health promotion activities. The *Community Guide* recommends two best practices related to communication:

- Provide patients with appropriate education.
- Implement multiple communication strategies regarding health promotion services.

Provide Patients with Appropriate Education

The *Community Guide* examines the role of education as a health promotion tool for

addressing many health-related lifestyles and clinical preventive services. In most cases there is insufficient evidence regarding the role that education *alone* plays in influencing lifestyles or use of services. In almost all cases where the *Guide* finds there is sufficient evidence to make a recommendation, education must be combined with some other health promotion component to be effective. For example, educating providers so they can help their patients quit tobacco use is effective *if* combined with prompts to talk with their patients. Education to increase vaccination rates is more successful if combined with other components such as provider prompts, expanded clinic hours, and reduced out-of-pocket expenditures. And successful efforts to address overweight and obesity include multi-component campaigns, of which education is just one piece.

The education-alone exception is breast cancer screening: the task force that prepares the *Community Guide* has found strong evidence that one-on-one patient education, alone, promotes use of this screening service.

Implement Multiple Communication Strategies Regarding Health Promotion Services

The *Community Guide* is rich with communication strategies throughout its many recommendations. For example, in addition to its recommendation to conduct community-wide communication campaigns to increase adult physical activity, the *Guide* also recommends using mass media campaigns in combination with other health promotion best practices to increase tobacco use cessation and breast and cervical cancer screening. The *Guide* also recommends using small media, such as brochures, flyers, posters, newsletters, and videos, to increase breast cancer screening.

It is important to note, though, that many of the *Community Guide's* specific recommendations for increasing use of health promotion services are simply forms of communication in their own right. For example, patient and provider education, patient service reminders and provider prompts, employee point-of-decision prompts, and physical activity informational outreach are all communication strategies. Consequently, in all of their health promotion efforts employers would do well to consider how they will use various communication strategies to both motivate and inform their employees.

D.2. Tracking Employee Health Behaviors

In theory, tracking employee health behaviors (while ensuring that the information collected is anonymous to the employer) could help employers manage health benefits and develop or adopt workplace health promotion policies and programs appropriate for their employees. But the existing research on whether health behavior tracking specifically affects health behaviors and health status—and an employer's return on investment—is not yet conclusive. For example, health risk assessment (HRA), a management tool designed to achieve these objectives, has not yet been found to directly affect health behavior outcomes or health status. One study of over 26,000 employees in a large, multi-national firm did find, however, that employees who participate in HRA *within the context* of a comprehensive health promotion program had lower medical claims costs than similar employees who did not participate in the HRA.[22] Part III of this report looks more closely at the design, use, and effectiveness of HRA.

Summary

As anticipated, we found that the research and grey literature and the Web provide limited information on whether and to what extent Washington State employers offer health promotion benefits, policies, and programs. The information we found offered only a preliminary sketch of the scope of employer health promotion efforts.

National data, serving as a proxy for state-level data, suggest that employment-based health insurance coverage of several key clinical preventive services aimed at reducing chronic disease in adults—including colorectal cancer screening, influenza vaccination, and tobacco cessation counseling and medication—is very likely lacking in Washington State, perhaps severely so. Employer Web sites (and some fairly old research data) suggest that when it comes to Washington State workplace health promotion policies, smoking bans or restrictions are one of the most common. These same Web sites also suggest that larger firms in Washington State appear to have more wherewithal to adopt or purchase health promotion programs, while smaller firms develop in-house, and thus possibly less expensive, strategies for promoting their employees' health.

Two expert sources on best practices in health promotion—*Prevention Priorities: Employers' Guide to the Highest Value Preventive Health Services* and the *Community Guide*—offer important recommendations that employers of any size can heed to enhance their efforts in employee health promotion. The consistency and strength of the evidence for several of these expert recommendations for specific clinical preventive services suggest that they could apply to other services, as well. For example, given that reducing out-of-pocket costs for breast cancer screening, vaccinations, and tobacco cessation treatment increases the use of these services, it could make sense for employers to eliminate or reduce these costs for other recommended clinical preventive services, too—such as screening for high blood pressure, high cholesterol, and cervical and colorectal cancers. Employers also could take a proactive stance on ensuring that their tobacco cessation programs offer the recommended combination of counseling and medications, and that *all* appropriate medications, including over-the-counter nicotine replacement therapy, are covered. Given the evidence that these medications are cost-saving, mandating this sort of coverage could be high on an employer's list of prevention priorities.

Employers—or any organization sponsoring health promotion—do face a conundrum in providing these activities, however: that is, in general, lifestyles, such as tobacco use, engaging in adequate physical activity, or maintaining a healthy body weight, are much more important contributors to employees' health and health care costs than are use of clinical preventive services. Yet the tools to promote healthy lifestyles are not as effective in the long term as those designed to increase use of screening and other clinical preventive services. Consequently, workplace programs that focus on health-related lifestyles can certainly generate improvement in the short term—such as increased physical activity and lower body weight—but their long-term effectiveness at maintaining these lifestyles is as yet unclear.

Fortunately, there is some cross-over between health-related lifestyle activities and clinical preventive services. For example, one of the most cost-effective clinical preventive services,

tobacco cessation counseling and medications, addresses an important lifestyle: tobacco use. Another highly cost-effective clinical preventive service, influenza vaccination, works in concert with lifestyle activities such as increased physical activity and weight loss to improve chronic disease risk factors—such as those for heart disease—and also helps avoid exacerbation of existing chronic disease. By optimizing their health insurance benefits to include proven high-value, cost-effective clinical preventive services, employers make an investment that works together with health promotion lifestyle activities to affect the incidence and prevalence of chronic diseases in their workforce.

Our research also revealed the importance of communication in almost all health promotion activities: communication *about* the activities being implemented and communication as an activity in and of itself.

Finally, the preliminary research approach we used developed enough information to strongly suggest that the most effective way to determine what types of employers in Washington State could use health promotion assistance and the types of assistance they could use would be to communicate directly with a representative sample of employers who can provide more detailed information on their health promotion efforts and goals.

Table 21. A Sample of Washington State Employer Health Promotion Benefits, Policies, and Programs, 2004*

	Health Promotion Benefits†	Health Promotion Policies	Health Promotion Programs
LARGE COMPANIES (>1,000 employees)			
Avista Spokane	• Medical and dental insurance.	• Policy of hiring individuals who do not smoke tobacco. • On-site employee vegetable garden.	
Boeing Seattle (Headquartered in Chicago)	• Depending on the worksite location (including those outside of Washington State) and medical plans offered, Boeing health benefits include, among others: - Disease management programs for asthma, diabetes, cardiac care, and lower back pain. - Nurse advice line • *BoeingWellness*—a single source for health care answers via the Mayo Clinic; employees can set up a personal page; also offers interactive wellness tools and services.		• *Free & Clear*, a tobacco cessation program extended to spouses. • Fee-based *Boeing Employees Health and Fitness Program* (25 fitness centers near 15 Boeing sites nationwide; some also provide health counseling and testing, training, and injury prevention and recovery). • Flu shots. • Wellness lectures. • *Weight Watchers at Work.*® • Health and safety fairs. • *Harmony Health Letter*. • Online health risk appraisal. • *Family Care Resources*. • Employee Assistance Program (EAP).‡

Table 21. A Sample of Washington State Employer Health Promotion Benefits, Policies, and Programs, 2004*

	Health Promotion Benefits†	Health Promotion Policies	Health Promotion Programs
Coinstar Bellevue	• Medical and dental insurance.		• *Healthy Habits*
Expedia.com Bellevue	• Medical and dental insurance.		• Fitness subsidy; EAP
King County Seattle	• Medical insurance including full coverage of clinical preventive services such as cancer screening and influenza vaccination. • *Healthy Incentives* program: covered services remain the same, but employee out-of-pocket expenses, such as deductibles and co-pays, depend on their active participation and the healthy actions they choose to take. Program includes a confidential wellness assessment and personalized action plan.	• On-site bicycle racks; on-site gyms. • Workplace Violence Protection policy (PER 18-8 (AEP)): prohibits executive branch officers and employees from wearing, transporting, or storing, firearms or other dangerous weapons in King County buildings and facilities, county vehicles, or on their person while on County business.	• *Health Matters*, a monthly newsletter offering health information and health tips in an easy to ready, informative format. • Physical activity event sponsorship, such as Walk Fest 2005. • *Healthy Workplace Funding Initiative*, to support efforts to help employees eat smart and move more while at work. Potential uses of this funding include, for example, programs, classes, activities, or purchase of individual or group items (like pedometers or a refrigerator). • Promotion of community events, such as *Heart Walk*. • EAP and *Making Life Easier* program.
Microsoft Redmond *cont...*	• Two health plans with no payroll contribution or deductible; one health plan with 100% coverage for routine preventive care. • *MicrosoftHealth.com* offers…		• *Stay Fit Program* offers paid health club memberships where available, or taxable income to apply to a personal health and fitness program. • EAP

Table 21. A Sample of Washington State Employer Health Promotion Benefits, Policies, and Programs, 2004*

	Health Promotion Benefits†	Health Promotion Policies	Health Promotion Programs
Microsoft, cont.	…company benefit information; prescription drug ordering and refilling; medical and dental claims review; personal health information management; and access to other health and medical information. ● 24-hour health line.		
Starbucks Seattle	● Medical and dental insurance, including prescription drug coverage, mental health services, and chemical dependency treatment.	● *Partner Connection Program* links groups or teams of 3+ who share common interests, including physical activities such as sports. Provides funding and use of firm communication tools and meeting space. ● On-site gym, rooms for yoga instruction, sauna, ping pong tables (at headquarters). ● Headquarters employees who bike or walk are eligible for a cash subsidy or free membership at the on-site gym.	● Discounts and memberships to fitness centers. ● EAP
University of Washington Seattle	● Medical and dental insurance. ● The Public Employees Benefits Board (PEBB) health insurance programs offer full coverage of preventive care services.	● Smoke-free workplace policy.	● *UWellness* program includes information on employee worksite health, employee health benefits, nutrition and fitness, violence prevention, and wellness services provided at the worksite. ● EAP *(UW CareLink)*.

Table 21. A Sample of Washington State Employer Health Promotion Benefits, Policies, and Programs, 2004*

	Health Promotion Benefits†	Health Promotion Policies	Health Promotion Programs
Weyerhaeuser Federal Way	• Medical and Dental insurance. Depending on worksite, health insurance benefits include: - Preventive health care visit. - Diabetes case management. - Colorectal and prostate cancer screenings; mammography screening; Pap tests. - Blood pressure and cholesterol screening. - Vaccinations: influenza, Pneumococcal, tetanus. - Prescription drug coverage - Mental health and substance abuse treatment.		• *Excel*, a worksite wellness program that focuses on nutrition, physical activity, and stress management. Sample activities include health fairs, immunization days, on-site physical activities, *Health-Track* health screenings; *WellPower* employee education. Program implements American Cancer Society's (ACS) *Active for Life* and *Quitline*®. • EAP
MEDIUM-SIZE COMPANIES (200-999 employees)			
Amgen Seattle; Bothell (~900)	• Medical insurance, including prescription drugs and vision care, and dental coverage for full-time employees and their family members/dependents • *Personal Effectiveness Program* (offers counseling services)	• Thousand Oaks, CA, site offers Amgym, a staffed, fully equipped fitness center; company sponsors extracurricular teams.	
Association of Washington Cities Olympia *cont...*	• AWC Employee Benefit Trust, offering comprehensive medical coverage, dental coverage, and an employee assistance program.		• Supports member cities in Washington State in implementing wellness programs for their employees through its *AWC...*

Table 21. A Sample of Washington State Employer Health Promotion Benefits, Policies, and Programs, 2004*

	Health Promotion Benefits†	Health Promotion Policies	Health Promotion Programs
Association of Washington Cities, cont. (Membership includes all 281 WA cities and towns)			…*Wellness Works* Program. The program includes: - *HealthCheck Plus* offers an HRA and on-site health screenings for Regence Blue Shield and Group Health Cooperative subscribers. - *AWC Municipal Games* supports inter-city employee sports leagues and events. - Ready-to-Go Wellness Campaigns, such as the 20-day *Colorful Choices* diet. - Do-it-Yourself Wellness Campaigns and Education Programs, offer a wide variety of wellness and education programs from which cities can choose. ● Conducts annual *WellCity Awards*, given by the AWC Employee Benefit Trust to cities that achieve a standard of excellence in employee health promotion.
Attachmate Bellevue (~700)	● Zero-premium health plans for full-time employees; 80% for family members/dependents (all work locations). Coverage includes prescription drugs. ● Dental insurance.		● EAP

Table 21. A Sample of Washington State Employer Health Promotion Benefits, Policies, and Programs, 2004*

	Health Promotion Benefits†	Health Promotion Policies	Health Promotion Programs
Eddie Bauer Redmond	• Medical and dental insurance.		• Free flu shots (location for this program is not clear). • EAP
Honeywell Redmond (~900) (Headquartered in Minneapolis)	• Medical and dental insurance. • Program that links employees/ family with chronic/serious illness with Harvard Medical School clinicians.		• Health screenings. • Education sessions. • *Life Planning Tools and Resources*, including a *Life Events Line* that provides free information, referrals, professional advice, counseling.
McKinstry Company Seattle (~600)	• Medical and dental insurance.	On-site health club; game room;	• Personal development seminars
REI Kent (~375)	• Medical and dental insurance.		• Flu shots.
SEL (Schweitzer Engineering Labs) Pullman (780+)	• Medical and dental insurance.	No smoking/smoke-free workplace policy.	
Sysco Food Services of Seattle Kent (~550)	• Medical insurance.	• *Lunch Punch* rewards employees who work out during lunch breaks or working hours. Fresh fruit provided three times a week.	• *For the Health of It*, encourages employees to lead healthy lives.
Underwriters Laboratories, Inc. Camas; Edmonds (Headquartered in Northbrook, IL)	• Medical and dental insurance.		• EAP

Table 21. A Sample of Washington State Employer Health Promotion Benefits, Policies, and Programs, 2004*

	Health Promotion Benefits†	Health Promotion Policies	Health Promotion Programs
Wizards of the Coast Renton	• Medical and dental insurance.	• Recreation programs. • On-site dojo and gym with showers and lockers.	
WRQ Seattle (~400)	• Zero-premium health insurance.	• Nap room; on-site dock space.	
SMALL COMPANIES (1-249 employees)			
Cranium Seattle (~70)	• Zero-premium medical and dental insurance for employees and their family members/dependents.		• EAP
Dendreon Seattle (~150)	• Zero-premium medical and dental insurance for employees; 75% for family members/dependents.		• EAP
Heritage Financial Corporation Olympia (~195)	• Medical and dental insurance.		• Annual flu shots • EAP • Health club memberships
Mobilisa Port Townsend (12)	• Medical and dental insurance.		• EAP • 24-hour nurse hotline. • Employees and immediate family members may join corporate gym membership.
Rainier Pacific Bank Tacoma (~220) *cont...*	• Benefit dollars provided to employees to cover medical and dental health insurance premiums.	• Employee sports teams sponsorship including slow-pitch softball, golf, and others, to encourage personal wellness.	• On-site free flu shots. • On-site fee-based massage. • Participation in the ACS *Relay for…*

Table 21. A Sample of Washington State Employer Health Promotion Benefits, Policies, and Programs, 2004*

	Health Promotion Benefits†	Health Promotion Policies	Health Promotion Programs
Rainier Pacific Bank, cont.			...*Life* and AHA *American Heart Walk.* • EAP
Seattle Metropolitan Credit Union Seattle (~120)	• Zero-premium medical and dental insurance for employees; 50% for family members/dependents.		• EAP • Free flu shots.

*Information in this table was compiled from company Web sites in late 2004, early 2005. Companies are arranged according to approximate size of workforce in Washington State.

† Although we were most interested in whether an employer's health insurance benefit covered preventive care, especially clinical preventive services, where this detail was not available we include in this table whether the employer offered any medical and dental insurance at all.

‡ In some cases, employer Web sites list an Employee Assistance Program (EAP) as being part of the employer's health benefits. In other cases, an EAP is listed among other benefits of employment. In this table, we have followed the lead of the employer.

Part II References

1 This definition taken from: www.pemcocorp.com/library/glossary.htm.

2 U.S. Preventive Services Task Force, 1996. *Guide to Clinical Preventive Services, Second Edition.* International Medical Publishing, Inc. www.ahrq.gov/clinic/uspstfix.htm. See also: *Pocket Guide 2005*. www.ahrq.gov/clinic/pocketgd.htm.

3 Partnership for Prevention, *Prevention Priorities: Employers' Guide to the Highest Value Preventive Health Services.* www.prevent.org.

4 Task Force on Community Preventive Services, *Guide to Community Preventive Services.* www.thecommunityguide.org.

5 Hopkins DP, Briss PA, Ricard CJ, et al. Reviews of evidence regarding interventions to reduce tobacco use and exposure to environmental tobacco smoke. *Am J of Preventive Medicine* 20(2S): 16-51.

6 Solanki G and HH Schauffler. Cost-sharing and the utilization of clinical preventive services. American Journal of Preventive Medicine 17(2): 127-133.

7 Stone EG, Morton SC, Hulscher ME, et al. Interventions that increase use of adult immunization and cancer screening services: A meta-analysis. *Annals of Internal Medicine* 136(9): 641-651.

8 See: www.thecommunityguide.org/cancer/screening/ca-screen-int-b&c-reduce-cost.pdf.

9 See: www.thecommunityguide.org/vaccine/vpd-int-acc-out-of-pocket.pdf.

10 See: www.thecommunityguide.org/tobacco/tobac-int-out-of-pocket.pdf

11 See, for example: 1) USPSTF, November 2003. *Counseling to Prevent Tobacco Use and Tobacco-Caused Disease: Recommendation Statement.* AHRQ Pub. No. 04-0526; 2) CDC, [undated]. *Coverage for Tobacco Use Cessation Treatments*. www.cdc.gov/tobacco/educational_materials/cessation/.

12 See www.thecommunityguide.org/cancer/screening/default.htm. Also see, for example, Rosser WW, McDowell I, and C Newell. Use of reminders for preventive procedures in family medicine. *Canadian Medical Association Journal* 145(7): 807-814; and Ornstein SM, Garr DR, Jenkins RG, et al. Computer-generated physician and patient reminders. Tools to improve population adherence to selected preventive services. *Journal of Family Practice* 32(1): 82-90.

13 Bondi MA, Harris JR, Atkins D, French ME, and B Umland. Employer coverage of clinical preventive services in the United States. *Am J of Health Promotion* (in press).

14 Boeing. *Pay & Benefits Overview: Eligible U.S. Nonunion Employees.* Accessed at www.boeing.com.

15 Task Force on Community Preventive Services. *Effectiveness of Smoking Bans and Restrictions to Reduce Exposure to Environmental Tobacco Smoke (ETS)*. See also *Guide to Community Preventive Services: Tobacco Use Prevention and Control*. Both available at www.thecommunityguide.org/tobacco.

16 Organized Labor & Tobacco Control Network. *Priorities & Activities*/*Reduce Smoking.* www.laborandtobacco.org/benefit/reduce-tobacco-use.php.

17 Kinne S, Kristal AR, White E, and J Hunt, 1993. Work-site smoking policies: Their population impact in Washington State. *Am J of Public Health* 83(7): 1031-1033.

18 See, for example, www.findaflushot.com/corporate_services.php (national example) and www.fhshealth.org/foh/flu.asp (Washington State example). These are just two examples among many.

19 Harris JR, Kulzer J, Pellegrini A, 2003. *Chronic Disease Opportunities at Weyerhaeuser.* Unpublished paper.

20 American Cancer Society. *Active for Life.* www.cancer.org/docroot/PED/content/PED_1_5X_Active_For_Life.asp.

21 See www.awcnet.org

22 Serxner SA, Gold DB, Grossmeier JJ, and DR Anderson. The relationship between health promotion program participation and medical costs: A dose response. *J Occup Environ Med* 45(11): 1196-1200.

Part III: Employer Health Risk Assessment Activities

Health risk assessment (HRA), also referred to as health risk appraisal, is becoming a popular method employers use to assess employees' health status so they can best identify their health care and wellness needs. To design effective health promotion activities for Washington State employers, we need to assess whether HRA, as currently designed, is considered an effective health promotion tool. We need to understand limitations and barriers to performing HRA in the workplace. And we need to discover whether employers in Washington State are using HRA, what HRA resources are available to them, and where they can be found.

I. Introduction: What is Health Risk Assessment?

The ideal HRA is a process that involves collecting information from an individual to identify health risk factors, providing feedback targeted to that individual, and offering services that facilitate health-promoting behaviors by the individual.

Since the general introduction of HRA in Robbins and Hall's 1970 book *How to Practice Prospective Medicine*, the content and utility of HRA instruments have evolved considerably.[1] A typical HRA instrument collects information on demographics (for example, age and gender), lifestyle behaviors (such as tobacco and alcohol use, exercise, and nutritional habits), and a personal and family medical history. Some instruments also ask respondents to supply physiological data, such as height, weight, blood pressure, and cholesterol levels.

HRA was initially proposed as a tool for physicians to use in anticipating future disease risk. Now, the HRA instrument is more commonly self-administered by individuals. HRA instruments are becoming more widely available and easier to use thanks to the recent growth and use of Web-based interactive technology.[2]

A hallmark of HRA is personalized feedback, which often includes some suggested behavior changes to mitigate areas of highest personal risk. Many instruments also store data from repeated testing, which allows for generating follow-up messages to the individual and tracking personal progress over time.

HRA Fast Facts

- Health Risk Assessment (HRA) involves collecting information from an individual to identify health risk factors; providing the individual with targeted feedback; and offering the individual health-promoting services.
- A 1999 national survey found that among companies with a wellness program and 100 or more employees, 87 percent offered HRA.
- Employers implement HRA to raise awareness of employee personal health risks; to track changes in workforce health; to evaluate the effect of health insurance benefits and workplace health promotion policies and programs; and to help predict future health care costs.
- The literature does not suggest any clear causal relationship between HRA and health or health behavior outcomes.
- The most significant limitation of employee HRA has been low response rates. Other barriers include constraints on employee time and concerns about privacy and the sensitivity of health and health behavior information.

II. Research Findings

A. Use and Utility of Employer-Sponsored Health Risk Assessment

HRA has become a common component of workplace health promotion and wellness programs. A 1999 national survey found that among companies with a wellness program and 100 or more employees, 87 percent offered HRA.[3] HRA is a popular form of health promotion in the workplace in part because of its relatively low cost, ease of implementation, and wide applicability.

Although availability of HRA in the workplace is high, voluntary participation among employees often is low. Studies report variable participation rates ranging from 15 percent to over 70 percent across workplace and non-workplace settings.[4,5] Among employers in Washington State, HRA questionnaire response rates of just 10-15 percent have been reported.[6]

B. How Employers Use HRA

For employers, health risk assessment can be used in three basic ways. First, employers can offer HRA to employees as a behavioral intervention or to raise awareness of personal health risks. Second, employers can use employee health risk assessment data to track changes in the health of their workforce over time and to evaluate the impact of the health insurance benefits, health promotion policies, and health promotion programs they offer. HRA data also can be aggregated to help employers predict future health care costs or assess the dollar value of the level of health risk in their workforce.[7,8] Third, employers can use HRA data to identify high-risk employees and offer them specialized risk reduction services, such as disease management programs. To ensure protection of employee privacy, HRA is typically accomplished via a third party.

C. Utility of Employment-Based HRA

Unfortunately, HRA as traditionally implemented has not provided accurate aggregate data that reflects the risks and needs of the population assessed. Evidence suggests that when HRA questionnaires are voluntary, respondents are not representative of the population. Generally, the most health-conscious employees are the most likely to complete an HRA questionnaire.[9] The tendency of these surveys to collect information from the "worried well" has implications for HRA as a *surveillance* tool—that is, as a mechanism for collecting, collating, analyzing, and tracking the health status of a population. This is because if the responses of the "worried well" are used to represent the overall employee population, their data will often underestimate health risks present in the overall population.

To overcome voluntary self-selection, and thus biased response rates, some employers have made significant and, in some cases successful, efforts to survey all or nearly all of their employees—this is known as conducting an HRA census. Employers often offer incentives to increase employee participation. Johnson & Johnson, for example, offers a $500 reduction in health insurance premiums to employees who complete an annual HRA questionnaire during their insurance open enrollment period. This incentive program has consistently yielded response rates of greater than 90 percent.[10] Other workplace programs and assess-

ments that use incentives to boost response and participation rates suggest that much smaller incentives coupled with regular reminders can generate sufficient response rates.[11]

A second and more efficient method for employers to achieve accurate, aggregate data is to collect HRA responses from a statistically defined random sample of employees. This method often requires some form of incentive to ensure that randomly selected employees will complete the survey; however, a relatively small total number of surveys (about 400) can provide sufficiently accurate population data. Furthermore, this method does not preclude offering HRA to the entire employee population—it requires only that the random sample be analyzed separately.

D. HRA Availability

HRA instruments are widely available on the Internet, through health plans, and from various health care facilities. Although employers could make use of these free resources, there is little evidence to suggest that this is common practice. Instead, employers most often contract with a third-party vendor or purchase software that will supply and administer the surveys, analyze the data, and compile an aggregate report. The number of companies offering such HRA services has increased in recent years. Table 22 lists the 10 most common HRA surveys, according to the Society of Prospective Medicine's 1999 *Handbook of Health Assessment Tools*.[12]

Table 22. Ten Most Common HRA Surveys (as identified by the Society of Prospective Medicine), 1999

HRA Tool	Developer	Contact Information
1. Health Quotient	WebMD	http://www.webmdhealth.com/hsg/solutions.html
2. Health Risk Appraisal	Univ. of Michigan	http://www.umich.edu/~hmrc/healthasse.html
3. Health Path		650-454-3577
4. Health Steps		651-454-3577
5. Health Monitor	Summex Corp.	https://www.summex.com/smx2/index.asp
6. e-Health Management System	Mayo Clinic	http://www.mayoclinichmr.org/products/hra.cfm
7. About Health Survey	MedAppraisal	407-741-4756
8. Building A Healthier You		617-357-9876
9. ASAP		http://www.mygroup.com/chi_1_health_asap.html
10. Health Check	McLaughlin/Young	617-338-1766

Source: Society of Prospective Medicine. *Handbook of Health Assessment Tools, Fourth Ed.* 1999: Occupational Health Strategies, Inc. (Charlottesville). For information about the book, see www.healthyself.org/handbook1.htm.

E. HRA Instruments Used in Washington State

The HRA instruments described below are among those most frequently used by employers nationally and, as indicated, by several large employers in Washington State. Unfortunately, although they tend to ask many of the same types of questions there is important variation in question content across the survey instruments. Consequently, results cannot be benchmarked

or compared among populations responding to the different surveys, or against national health data, such as data collected using the *Behavioral Risk Factor Surveillance System*.

E.1 HealthQuotient

HealthQuotient, developed by the WebMD Health Services Group, is an online health risk assessment questionnaire that scores an employee's health status and provides recommendations for improvement and behavior change. *HealthQuotient* is one of the tools comprising WebMD's Personal Health Manager (PHM) package currently available to employers. A second package, Personal Health Decision (PHD), is designed specifically for employee use and contains a variety of interactive guides related to consumer medical care decision making.

Web MD also offers Personal Health Insight (PHI) for use by employers. This set of tools collects and analyzes aggregate health data and identifies population health risks. The Web-based technology PHI uses to collect data and manage communication also can be used by an employer for other purposes, such as communicating information related to a workplace wellness program and conducting additional employee surveys.

E.2 Health Risk Appraisal

This University of Michigan Health Management Research Center HRA system is among the most widely researched and used instruments among employers. The University has provided HRA services for a range of companies, including Bank One, General Motors, Progressive Corporation, Steelcase, and in Washington State, the Weyerhaeuser Corporation.[13]

E.3. e-Health Management System

The Mayo Clinic offers a range of self-assessment tools under its e-Health Management programs. The advertised price for the Clinic's basic package is $0.39-0.49 per month per employee. Several employers in Washington State—such as Boeing—contract with the Mayo Clinic to provide content and tools for their wellness Web pages. Mayo also provides wellness services for other large, Fortune 1000 companies, including First Tennessee National Corporation, Hoffman-La Roche, Intel, and Lucent Technologies.[14]

The Mayo Clinic Health Risk Assessment collects information that can then be analyzed and reported in three formats. The *Personal Health Report* outlines an individual's health status, risks, and readiness to change. *Group Reports* contain a summary of aggregated employee individual information; the software allows employers to stratify data and customize the reports based on various employee or worksite characteristics. *Intervention Reports*, which are an add-on to the overall assessment package, function as a disease management intervention. The Clinic offers nine disease-specific modules, including diabetes, tobacco use, and weight management.

F. Implementing HRA via Health Plans

Some employers implement HRA of their workforce through their employee health plans or their *third-party administrator* (TPA) if they are self-insured. For example, as part of its TPA services, AETNA offers an employee-directed wellness package called *Simple Steps*.

As a complement to health risk assessment, the AETNA program also provides employers with tools to assess health-related productivity within the workforce and to evaluate the design and impact of their wellness benefits.

G. Effectiveness of HRA as a Health Intervention

The literature offers a substantial amount of research that examines the effectiveness of HRA as an intervention on a variety of outcomes, including: health behaviors (such as physical activity, tobacco use), use of health screening services (such as breast cancer screening, cholesterol testing), physiological indicators of health status (for example, body mass index, blood pressure), worker absenteeism, and psychological or mental health factors (such as feelings of stress).[15]

The literature does not, however, suggest any clear or powerful causal relationships between HRA and health or health behavior outcomes. More than 25 controlled studies have examined the effect of HRA on changes in health behavior and overall, the evidence suggests that HRA may have some positive effect in certain settings, among some sub-populations.[15] The strongest effects have been documented in studies where HRA is implemented in conjunction with other health promotion tools and resources.[16]

The body of health promotion literature suggests that tailored health messages are more effective in influencing behavior change than generic messages. But there appears to be a dearth of research about the effectiveness of tailored *HRA* feedback, in particular. Nearly all HRA surveys currently in use are electronic or Web-based, but it is not yet known whether Web-based feedback that directly links an employee to treatment resources is more effective in producing behavior change than giving the employee general messages about risk, or providing the employee with alternative, non-Web health promotion strategies. As of 2004, no randomized control study involving HRA in the workplace has been published.

H. Limitations and Barriers

Traditionally, the most significant limitation of employee HRA has been low response rates. Other barriers to HRA effectiveness, perhaps related to low response rates, are constraints on employee time and concerns about privacy and the sensitivity of health and health behavior information. Employees are concerned, for example, about who might gain access to the information gathered and how they might misuse it: for example, to inform job promotion or layoff decisions. Employees also are concerned that tailored, personalized HRA feedback—for example, regarding tobacco use, healthy eating, and physical activity—could blur the line between work and personal life. And they wonder whether employee participation in HRA is as "voluntary" as employers assert. Despite these barriers, HRA has been successfully implemented across a wide range of employment settings.

The effectiveness of HRA on behavior change within a population has been studied in workplace and non-workplace settings, both with mixed results. In part, this is because the evaluations of HRA programs have not consistently been of high quality. HRAs also are not implemented in the same way across employers. A minority of employers has achieved valuable aggregate data via an HRA census, but often at a high financial cost. To success-

fully extend the benefits of employee risk behavior surveillance to more employers would require a system that can collect representative HRA data at relatively low cost.

Summary

HRA is a potentially valuable health promotion tool for employers, and its nature and effectiveness continue to evolve. HRA can be used by employers in at least three ways:

- As an intervention that can influence employee health behaviors.
- As a population survey tool to monitor health risks among employees and measure the effect of health insurance benefits, workplace health promotion policies, and workplace health promotion programs on employee behavior.
- As a mechanism to identify high-risk employees, so that they can be offered specialized risk-reducing services.

Evidence of HRA influence on health behavior change is inconsistent. Potentially promising, technology-enabled, tailored feedback systems have not yet been rigorously evaluated. As traditionally implemented, HRA does not provide accurate population-level data; however, there are two approaches that could overcome this weakness. First, some employers have successfully demonstrated the use of incentives to collect data from all or nearly all employees (i.e., a census). Second, as an alternative, responses can be collected from a smaller random sample of employees, which provides accurate estimates of population risk at a lower cost.

Part III References

1 Robbins LC and JH Hall. How to Practice Prospective Medicine. (Indianapolis: Methodist Hospital, 1970).

2 RAND. Evidence Report and Evidence-Based Recommendations: Health Risk Appraisal and Medicare. Evidence Report prepared for the US Dept of Health and Human Services, Health Care Financing Administration (Contract No. 500-98-0281). www.cms.hhs.gov/healthyaging/2c.asp.

3 Wilson MG, DeJoy DM, Jorgensen CM, Crump CJ. Health promotion programs in small worksites: Results of a national survey. *Am J Health Promotion* 13(6) July/Aug 1999: 358-65.

4 Johns RE. Health hazard appraisal – A useful tool in health education? *Proceedings of the 12th Annual Meeting of the Society of Prospective Medicine*, Bethesda, MD, 1977:61-65.

5 Connell CM, Sharpe PA, Gallant MP. Effect of health risk appraisal on health outcomes in a university worksite health promotion trial. *Health Educ Res* 10(1995):199-209.

6 Health Promotion Research Center, University of Washington. Unpublished data, Sept 2004.

7 Yen LT, Edington DW, Wittin P. Association between health risk assessment scores and employee medical claims costs in a manufacturing company. *Am J Health Promo* 6(1) Sept-Oct 1991: 46-54.

8 Wright D, Adams C, Beard MJ, Burton WN, Hirschland D, McDonald T, Napier D, Galante S, Smith T, Edington DW. Comparing excess costs across multiple corporate populations. *J Occup Environ Med* 46(9) Sept 2004: 937-45.

9 Nice D, Woodruff S. Self-selection in responding to health risk appraisal: Are we preaching to the choir? *Am J Prev Med* 5(5): 249-56.

10 Goetzel RZ, Ozminkowski RJ, Bruno JA, Rutter KR, Isaac F, Wang S. The long-term impact of Johnson & Johnson's Health & Wellness Program on employee health risks. *J. Occup Environ Med* 44(5) May 2002: 417-424.

11 Beresford SA, Shannon J, McLerran D, Thompson B. Seattle 5-a-Day Work-Site Project: Process evaluation. *Health Edu Behav* 27(2): 213-222.

12 Society of Prospective Medicine. *Handbook of Health Assessment Tools, Fourth Ed.* 1999: Occupational Health Strategies, Inc. (Charlottesville). See www.healthyself.org/handbook1.htm.

13 University of Michigan Health Management Research Center. www.umich.edu/~hmrc/healthasse.html

14 Mayo Clinic Health Management Resources. www.mayoclinichealthmanagementresources.com/products/hra.cfm

15 RAND. *Evidence Report and Evidence-Based Recommendations: Health Risk Appraisal and Medicare.* Evidence Report prepared for the US Dept of Health and Human Services, Health Care Financing Administration (Contract No. 500-98-0281). www.cms.hhs.gov/healthyaging/2c.asp.

16 See, for example: Serxner SA, Gold DB, Grossmeier JJ, and DR Anderson. The relationship between health promotion program participation and medical costs: A dose response. *J Occup Environ Med* 45(11): 1196-1200.

Part IV: Washington State Employers' Thoughts on Employment-Based Health Promotion Activities

The best resource to turn to for discovering what health promotion and wellness activities employers are conducting is the employers themselves. Other stakeholders who work with employers—such as health insurers, brokers, and unions—also can provide insight into employers' health promotion assistance needs.

I. Introduction

Our review of the research literature found no information on the specific health promotion activities of employers in Washington State, and our pilot review of a sample of Web-based resources found only a modest amount of information. To see if we could corroborate and expand somewhat on what we were able to learn through these sources, we interviewed a small group of Washington State employers and related stakeholders. We anticipated that interviewing this small set of *key informants* also would help us determine whether this research method might be an effective approach for future study of employer-based health promotion programs.

Employer Interview Fast Facts

The observations of a small group of stakeholders in Washington State were strikingly consistent with regard to employment-based health promotion activities. The dominant themes were:

- The primary incentives for employers to offer health insurance are competition for employees and employee retention.
- Employers expect health insurance plans to include preventive services.
- Cost is the primary criterion employers use in selecting preventive care services to include in their health insurance benefits.
- Employers turn to brokers, industry and trade publications, professional colleagues, government publications, conferences and meetings, professional organizations, consultants, and on-line resources for information on health promotion programs.
- The marketplace could offer more analysis of wellness programs' return on investment—with regard to financial returns and improved health outcomes—and more targeted assistance for employers.

II. Research Approach

A. Key Informant Interviewees

We selected a small sample of 10 stakeholders to interview, including:

- Employers (4)
- Health insurance intermediaries (2)
- Health insurers/health plans (2)
- Government purchaser (1)
- Trade union (1)

We selected potential interviewees based on our expectation that they had strategic knowledge of employer-based health promotion efforts.

The sample was not designed to be representative of all possible employers or other stakeholders, but rather of these five key categories of stakeholder types. All participants were owners, top executives, or upper management, including human resources managers.[†]

A.1 Employers

We interviewed four employers. We defined small employers as having 1-249 employees; medium 250-999; and large 1,000 or more. Interviewees included:[‡]

- A small employer based in the Puget Sound region, employing skilled labor and administrative staff.
- A medium-sized employer in rural Western Washington that employs skilled labor, service, administrative, and professional staff.
- A large, multinational firm with headquarters in Washington State, employing skilled labor and administrative and managerial staff.
- A large national firm with headquarters in Washington State employing skilled service employees.

A.2 Health Insurance Intermediaries

We interviewed representatives from two organizations that offer very different types of intermediary services to employers:

- An insurance broker serving Washington, Oregon, and Idaho, with some clients worldwide.
- A purchasers' cooperative that serves Eastern Washington and Northern Idaho, with recent limited coverage in the Seattle area.

For this small sample of interviewees we combined the broker and the cooperative into one category because both function as intermediaries between employers and insurers and other health promotion program providers.

A.3 Health Insurers/Health Plans

We interviewed representatives from two organizations:

- A large Washington-domiciled health insurer with a statewide market. About 40 percent of the insurer's clients are small employers, 30 percent medium, and 30 percent large.
- A wellness program developer and consultant headquartered outside of Washington State with a branch office in the Puget Sound region. The greatest share of the firm's clients are in Washington State. The firm works with employers with 100 or more employees, with a focus on those with 1,000 or more, and primarily with self-insured employers.

[†] For information on the power of small samples of key informants, and for sampling strategies, see: Needleman C and ML Needleman. Qualitative methods for intervention research. *Am J Ind Med* 29(4) Apr 1996: 329-337.
[‡] We do not indicate the number of employees in these descriptions to help ensure the firms are not identifiable.

For this small sample of interviewees we combined the insurer and the wellness program developer into one category because both function as health care service and program providers.

A.4 Government Purchaser

We conducted two interviews with representatives of a single, large government organization that purchases health insurance for its employees statewide, who include skilled labor and administrative, managerial, service, and professional staff.

A.5 Trade Union

We interviewed a representative of a local trade union with government employee members. This union represents the employees covered by our Government Purchaser key informant.

B. Interview Questions

Our interview protocols grouped questions into five categories:

- Background Information—for example, location and size of organization; market area.
- Insurance Benefits and Workplace Wellness Programs—for example, type of insurance and other health promotion products offered (that is, purchased for employees or brokered/sold to employers); reasons for offering such programs.
- Workplace Health Policies—for example, policies other than occupational safety, such as a smoke free workplace.
- Program Administration—for example, evaluation of health promotion efforts; resources used for health promotion information and guidance.
- The Future—for example, opinion on future of employment-based health insurance and health promotion programs.

For more information on our research methods, see Appendix A.

III. Research Findings

We present the findings of our key informant interviews in a series of tables grouped by interview category (with the exclusion of Background Information):

- Insurance Benefits and Workplace Wellness Programs—Tables 23-27
- Workplace Health Policies—Table 28
- Program Administration—Tables 29-32
- The Future—Table 33

The interview findings represent the ideas and opinions only of the respondents interviewed.

Insurance Benefits and Workplace Wellness Programs

Table 23: Key Informant Offer of Health Insurance and Thoughts On Why Employers Offer Health Insurance to Their Employees

	Employers	Intermediaries	Insurer**	Government Purchaser	Union
Offer?	*Yes.* All respondents offer health insurance to their employees. Products include HMOs, preferred provider organizations (PPOs), and self-insured products. The small employer and one of the large employers also offer flexible spending accounts (FSAs).*	**Broker.** *Yes.* Medical and dental insurance. Includes fully insured, self-funded HMO, PPO, and point-of-service (POS) products. Also FSAs, health reimburse-ment arrangements, and health savings accounts (HSAs).* **Purchasers' Coop.** *No.* Acts as an intermediary between employers and insurance/wellness product providers.	**Insurer.** *Yes.* Primarily POS and PPO products, along with FSAs and HSAs.	*Yes.* HMO, PPO, and POS products, along with an FSA.	The union does not directly purchase insurance for its members, who can enroll in insurance purchased by their government employer. The union negotiates with the government employer for employee health care coverage in union contracts.
Why do employers offer health insurance?	● Competition for employees. ● Employee retention. ● "The right thing to do" (large employer). ● To remain a non-union shop (small employer) ● Union contract requirements (medium employer).	● Competition for employees. ● Employee retention. ● "It's the right thing to do: employers feel an obligation to help employees meet the risks of life. Some feel this very powerfully and their benefit plans reflect this. Others do the bare minimum."		● Competition for employees. ● Employee retention. ● Regulatory requirements. ● Union demands.	● Competition for employees. ● Employee retention.

NOTES: *FSAs and HSAs are described in Part I, pp. 56-58, of this report. **We did not ask the Wellness Consultant questions about employer health insurance offerings.

Table 24: Is Preventive Care Covered, and What Drives Employers' Decision to Purchase Preventive Care Services?*

	Employers	Intermediaries	Government Purchaser and Union
Covered?	*Yes.* The small and two large employers' health plans include at least some preventive services. (We did not ask this question of the medium-sized employer). Although we did not ask about employee cost sharing for such care, the small employer offered that the firm covers preventive services at 100 percent.	**Broker.** *Yes.* Products offered by the broker cover preventive services "as a general rule." Respondent noted that employers expect this: "If preventive care isn't in the product, people get cranky." **Purchasers' Cooperative.** *No.* Recommends that its members offer smoking cessation, physical activity, and nutrition programs as part of their health insurance benefits, but does not yet broker these services.	*Yes.* The Government Purchaser, which purchases health insurance for the union members, uses the U.S. Preventive Services Task Force (USPSTF) recommendations for clinical preventive services as a guide in determining what services to include in its health plan offerings.** All preventive care is covered at 100 percent.
What drives the decision?	● Cost is the primary criterion. ● Approaching health care benefits from a health management perspective—that is, looking for cost-effective services that help manage employee health outcomes (large firm).	● Cost is the primary criterion employers use (broker). ● At the time of their policy renewal, employers adjust their health benefit based on many factors, including what else is going on in their organization and in their market (broker). ● Employers essentially have two tools for controlling health benefit costs: premium share and benefit design (broker).	● Cost is one driver in helping to determine what preventive care services to cover. ● The USPSTF guidelines, medical evidence, and regulations play roles as important as the role of cost.

NOTES: *Key informants not represented in the table were not asked or did not respond to applicable questions. **The work of the U.S. Preventive Services Task force is described in Part I, p. 16, of this report.

Table 25: Are Wellness Programs Offered?

Employers	Intermediaries	Insurer/Wellness Consultant	Government Purchaser and Union
Yes. The small and large employers offer wellness programs. (We did not ask this question of the medium-sized employer).	**Broker.** *No.* Does not offer any wellness programs to its employer clients, for two reasons: - Cannot control the quality of the products offered by the many vendors in the market. - Insufficient information on programs' effect on employee health care costs/claims. Encourages clients to implement wellness activities; many do, such as yoga, massage, gym membership, wellness lectures, and Employee Assistance Programs. **Purchasers' Cooperative.** *Yes.* HRAs, productivity surveys, and some wellness programs for employer members. The cooperative is developing exercise and nutrition programs for its members, and offers other health promotion and disease prevention programs and cost analyses. It does not offer health promotion products to employers with fewer than 25 employees.	**Insurer.** *No.* Does not yet offer wellness programs directly to employers, but is considering doing so in the future. Offers a "value-added" program to all enrollees, which includes discounts on gym memberships and vision and hearing services and hardware, in addition to coverage within their policy. **Wellness Consultant.** *Yes.* "Virtual" wellness programs offered via the Internet, e-mail, and telephone (instead of being employment or site-based). Uses customized health risk assessments (HRAs) to determine the best mix of wellness products for each employer.* Products offered include telephone consulting for high-risk employees; Web-based health management services for specific clients; health management publications; telephone-based health educators; and informational workshops.	**Government Purchaser.** *Yes.* Employee access to wellness programs depends on the health plan they choose and their worksite. The self-insured product offers smoking cessation and influenza vaccination (flu shots) as part of the contracted benefit package. Contracted insurers also offer wellness programs that employees can access by enrolling in one of their insurance products. Some worksites offer *Active for Life*, a workplace fitness program developed by the American Cancer Society; influenza vaccination; and Weight Watchers™ at Work, among other health promotion activities. **Union.** *No.* The union does not directly purchase wellness programs for its members—these are accessed by union members through their government employer.

* Health risk assessments (HRAs) are described in Part III of this report.

Table 26: What Drives Employers' Decision to Offer Wellness Programs?

Employers	Intermediaries	Insurer/Wellness Consultant	Government Purchaser and Union
● To ensure they have a healthy, ready-to-work workforce. This potentially translates into decreased absenteeism, improved productivity, and lower health care costs. ● For the small employer: cost is the primary criterion for choosing wellness program components. ● For the medium-sized employer: Government regulations. ● The medium-sized employer also noted that on-site wellness programs are space and cost prohibitive. ● For the two large employers with multiple worksites: Matching wellness program activities to local risks, needs, and wants. Program components and incentives need to appeal to a wide variety of employees.	● Cost is a primary factor in determining whether and what wellness programs employers buy. The purchasers' cooperative representative noted that offering wellness programs is the right thing to do, but "when times are tight, this is the first thing to be dropped." Larger firms with more resources are more likely to offer such programs. ● Unions, which sometimes request wellness programs to promote the health of their members, also can be a factor in employer purchasing decisions.	● The primary reason employers offer wellness programs is to moderate health care costs. ● Employee retention. ● The insurer respondent observed that bundling wellness programs with insurance products is not a selling point. The wellness consultant respondent observed that such bundling *is* becoming a product differentiator around the country; bundling will become more common as employers increasingly turn to insurers for help in reducing employee health care costs. ● Self-insurance: these employers are much more likely to invest in wellness programs. ● According to the wellness consultant, employee productivity is not a commonly cited reason for purchasing and offering wellness programs.	● Cost containment for the purchaser and the employee. Potential for a return on investment. ● Employee demand and morale. ● Potential for maintaining and enhancing employee health. ● Union negotiations. ● State regulation. ● Worksite-specific criteria, such as employee demographics and health status ● National health status bench-marks, such as obesity, asthma, diabetes, and heart disease.

Table 27: What Types of Wellness Programs Are the Employer Key Informants Offering?*

Small Employer	Large Employers (Two)	Government Purchaser
• Smoking cessation. • Influenza vaccination.	• Smoking cessation (both) • Influenza vaccination (one). • Gym memberships/on-site gym facilities (both). • Weight Watchers™ (one). • Informational lunches (one). • Newsletters (one).	• Influenza vaccination. • Weight Watchers™ at Work • *Active for Life* (American Cancer Society).

*Because we did not provide a copy of our questions prior to the interview, respondents had to recall wellness program components during the interview. Consequently, these lists might be incomplete or otherwise inaccurate. We did not ask the medium-sized employer about the types of wellness programs it offers.

Workplace Health Policies

Table 28: Are Workplace Health Policies in Place, and What is Their Impetus?*

	Employers	Government Purchaser
In place?	*Yes.* The small and large employers have workplace non-smoking policies that restrict smoking to certain areas. One of the large employers tried unsuccessfully to "regulate" the content of vending machines at two worksites.	*Yes.* Some work sites have workplace health policies, such as no smoking or designated smoking areas.
Impetus?	The primary impetus is state regulation and worker safety.	Some policies are implemented to respond to state regulations, others are local, workplace-based policies.

*Questions about workplace health policies applied only to the employers and the government purchaser. We did not ask these questions of the medium-sized employer.

Program Administration

Table 29: Are Employee Health and Wellness Needs Assessed?

Employers	Intermediaries	Insurer/Wellness Consultant	Government Purchaser	Union
Yes. The two large employers use health risk assessments (HRAs) to assess employees' health insurance and wellness program needs. One also analyzes health care claims information. Neither the small nor the medium-sized employer formally assess their employees' health care needs.	**Broker.** *No.* Helps clients determine what insurance and wellness programs to purchase by conducting health care claims analyses (at a level where individual employees cannot be recognized). Does not formally assess its clients' health care needs in any other way. **Purchasers' Cooperative.** *Yes.* Provides HRAs and cost analyses to its members.	**Insurer.** *No.* Works with its large employers (1,000 or more employees) and their consultants to help design assessments that are appropriate for their employees, but is isolated from these assessments. This work with employers is conducted through brokers. Sometimes large employers approach the insurer directly with specific coverage requests. **Wellness Consultant.** *Yes.* Nearly all clients use HRAs to help them make health insurance and wellness program purchasing decisions.	*Yes.* Plans to use HRAs in the future. Currently, examines claims data to create predictive modeling.	*No.* Does not formally assess its members' health care needs.

Table 30: Are the Use and Success of Wellness Programs Assessed in Any Way?*

Employers	Insurer/Wellness Consultant	Government Purchaser
Yes. Three of the employers track their employees' use of influenza vaccination. The small and medium-sized employers compare this information against subsequent absenteeism rates; the large employer does not. Among the four employers, tracking use and success of other wellness program components is less formal. One of the large employers conducts annual program evaluations on a site-specific voluntary basis, but plans to implement a central reporting function for all 300 of its wellness programs in 2005. The other large employer and the medium-sized employer use employee satisfaction surveys to gain program feedback.	**Wellness Consultant.** *Yes.* The "early innovators" among employers are integrating their health insurance and wellness activities, including tracking use and measuring success of wellness programs.	**Government Purchaser.** *No.* Does not track use and success of wellness programs on a statewide basis.

*Questions about use and success of workplace wellness programs applied only to the employers, insurer/wellness consultant, and government purchaser categories. Key informants not represented in the table were not asked or did not respond to the applicable questions.

Table 31. Where Do Employers Find Wellness Program Information? (An "X" indicates the interviewee identified this source; text provides additional information.)*

Information Sources:	Employers	Broker	Insurer	Wellness Consultant	Government Purchaser
Brokers	X Identified by the small and medium employers.	X For example, this broker sometimes provides clients with information on valid and useful Web sites.	X Postulated that most employers turn to brokers for information.	X	
Industry and trade publications	X Identified by the small and both large employers.	X		*(Offered the opinion that employers "get very little" information from industry associations or trade journals.)*	X
Networking/professional colleagues	X Identified by the small and both large employers.	X For example, regional round-tables of human resources people and CEOs.			X
Government publications	X One large employer cited the *Guide to Community Preventive Services: Systematic Reviews and Evidence Based Recommendations*, by the Task Force on Community Preventive Services.	X Offered that "perhaps [employers] use the U.S. Centers for Disease Control and Prevention" Web site.			X

continued…

Table 31, continued: Where Do Employers Find Wellness Program Information?

Information Sources:	Employers	Broker	Insurer	Wellness Consultant	Government Purchaser
Conferences and meetings	X Identified by both large employers.			X • *Evergreen Everwell* annual meeting in WA State. • *American Journal of Health Promo-tion* annual conference. • *National Wellness Institute* annual conference.	X
Professional organizations and associations	X Identified by both large employers. One specified the *Wellness Councils of America (Welcoa).*	X *Society for Human Resource Management (SHeRM)*			
Consultants	X Identified by both large employers.				X
Online resources		X		X	
Professional journals					X
Insurers				X	X
Employees					X

*The union respondent observed that employers get information through the union's work with the legislature and the union's political action, which translates into programs employers must implement for union employees.

Table 32: Suggestions for Services or Products to Help Employers Learn More About Employment-Based Health Promotion Activities

Employers	Intermediaries	Insurer/Wellness Consultant	Government Purchaser and Union
• **Insurer Products.** Insurers could develop products that incorporate wellness programs and give "credit" to the employer for having effective workplace programs. • **Additions to the *Guide to Community Preventive Services.*** The Task Force on Community Preventive Services could develop additional sections of the *Guide* that address specific health behaviors, such as diet/nutrition, physical activity, stress, depression, and pain management. • **Stakeholder Collaborations.** Employers and other stake-holders within a community or region could create a collaboration similar to Eastern Washington's *Inland Northwest Business Coalition on Health*, with the goal of learning about and developing responses to local health system and health insurance issues.	• **Data and Information: Health Risk Factors.** Data and information on specific health risk factors. • **Data and Information: Employer Risk.** Information targeted to employers on how they are specifically at risk and what to do about it. • **Presentations.** Presentations that describe the key components of health and wellness programs. • **Economic Analyses.** Economic analyses of preventive care benefits, including data on the financial returns of incremental improvements in health and clear information about lost productivity.	**Insurer** • **Data and Information.** Printed materials, such as brochures, booklets, pamphlets. Web site with information and down-loadable materials. • **Presentations.** Seminars or workshops. Individual information meetings. • **University Resource.** Noted that if the UW Health Promotion Research Center (HPRC) conducted all of the activities in the first two bullets, it would be a "wonderful resource." • **Welcoa.** Promote the *Wellness Councils of America (Welcoa)* to employers in WA State. • **Local Chambers.** Work with and promote local Chambers of Commerce, to whom employers turn for information. **Wellness Consultant** • **Data and Information.** Web sites, seminars, and workshops. • **University Resource.** HPRC would be a "very appropriate" and "ideal" resource, because it is seen as a third party: neither affiliated with the purchasing process nor biased.	**Government Purchaser** • **Data and Information.** Web-based clearing house of programs. • **Data and Information: Health Risk Factors and Economic Analyses.** More information about the health and financial impact of wellness programs for specific populations: "It would be great to be able to talk about health as an investment—with a return—and not just a cost, *and* have the data to back that up." • **University Resource.** University evaluations of various wellness programs regarding what works in public settings v. private settings, what is the return on investment, and comparisons across programs. **Union** • **Economic Analyses.** Economic information on return on investment: "…information that shows that there is money to be saved both for the state and the individual employees with improved health status."

The Future

Table 33: What Does the Future Hold for Employment-Based Health Insurance and Workplace-Based Health Promotion Programs?

Employers	Intermediaries	Insurer/Wellness Consultant	Government Purchaser	Union
• **Efforts to Moderate Costs:** There is a role for workplace-based wellness programs in the future, in particular if they can be shown to have a moderating effect on employers' health benefit costs. • **Consumer-Directed Health Plans:** The way in which employers offer health benefits is changing. In particular, their interest in consumer-driven health plans is increasing, as is the availability of these products. But these plans are unproven, in terms of cost savings and overall effects on employee health status.	• **Efforts to Moderate Costs:** Employers will continue to do everything they can to control rising health care benefit costs. Employers need proof of a return on their investment with regard to wellness programs. • **Consumer-Directed Health Plans:** Employer interest in HSAs is high, but "the most important thing is to get employees to understand how to be good health care consumers." Insurers won't lower employer premiums for consumer-directed health plans just because they have wellness programs rolled into them. • **Employee Incentives:** Employers are responsible for giving employees the right incentives to use insurers' new wellness Web sites.	• **Efforts to Moderate Costs:** In an effort to contain rising costs there will be a lot of experimenting in the next few years with new kinds of health insurance products. Wellness programs will become more integrated into business operations. With employers paying the bill, these programs will be more likely to be found in the workplace setting. • The Washington employer community—to which approximately 80 percent of the state's population has some link—has great potential to make a real difference in the health of the population and its use of health care services. Employer-based wellness programs have the potential to reach all of these people.	• **Efforts to Moderate Costs:** Businesses are looking for anything that will contain future health care costs and make them more predictable. There will be a role in the future for workplace-based wellness programs, particularly if employers can see an affect on their bottom line within an acceptable time frame. • **Consumer-Directed Health Plans:** HSAs require employees to bear more risk, and so will require the employer to provide information. Self-insured employers have more tools to offer employees to help them chose among health plans and HSA options, and to understand what their costs might be.	• **Efforts to Moderate Costs:** Continued financial pressures on employers will result in cost containment measures that do not support good health behaviors and good health outcomes for employees. Workplace wellness programs will have a role for all types of employers *if* the business case can be made for them. Wellness is a subject area that allows labor and management to work together to make positive changes: "It should not be assumed that these types of conversations will not work."

Summary

This small set of key informant interviews proved to be a rich source of primary information about the health promotion activities of employers in Washington State. Among these ten stakeholders there was striking agreement regarding health insurance and wellness programs, including:

- Employers, brokers, the government purchaser, and the union all cited competition for employees and employee retention as the primary reasons employers offer health insurance to their employees. (The insurer and wellness consultant either were not asked or did not answer this question.)
- Employers, brokers, the government purchaser, and the union all cited cost as the primary criterion employers use to determine whether and what preventive care services to include in their health benefits. (The insurer and wellness consultant either were not asked or did not answer this question.)
- All stakeholder groups observed that employers offer wellness programs in order to moderate their health care costs.
- Brokers were the most frequently cited source employers turn to for information on health promotion/wellness programs (cited by employers, the broker, insurer, and wellness consultant). Conversely, this particular group of stakeholders appears to agree that consultants, on-line resources, professional journals, or insurers are currently not good sources of information.

Areas where responses were not in agreement also were interesting. For example:

- The broker, insurer, and union currently do not offer wellness programs: The broker because both quality control and evidence of effectiveness are missing in the marketplace. The insurer because it is evaluating what kinds of programs it might offer and currently provides similar "value added" health promotion activities to its policy holders. The union because it relies on employers to offer wellness programs to union members.
- The two large employers, the government purchaser (also a large employer), the purchasers' cooperative, and the wellness consultant all use health risk assessment to evaluate employees' health and wellness needs. The broker, insurer, and union do not.

Finally, in looking toward the future, our stakeholders were very much in agreement in three areas:

- Employers will continue to turn to workplace-based health promotion/wellness programs to help moderate their health care benefit costs. But they need evidence there will be a return on this investment.
- Employers also will continue to turn to consumer-directed health plans to help moderate costs. But they must provide their employees with appropriate and sufficient information to help them be effective consumers if such plans are going to succeed.

- Employers need accurate, evidence-based information on health promotion activities from reliable, objective sources. The information should be targeted specifically at employers, offered through familiar avenues, and presented in ways that are readily understood.

The wealth of information yielded by this pilot sample of key informants strongly suggests that key informant interviews would be the most direct and useful method for understanding the current health promotion activities of employers in Washington State and their health promotion assistance needs.

Part V: Recommendations

The findings from this study offer a foundation for understanding Washington State's employer community and its health promotion assistance needs. Based on our research, we offer five recommendations for action that are targeted to people who work with employers, including intermediaries, health promotion consultants, and researchers. These recommendations provide a framework for improving and expanding on existing efforts to promote and support health promotion activities in Washington State workplaces.

I. Research Findings Summary

The greatest disparities in access to health insurance are borne by those who are uninsured, unemployed, or both. Yet research has found a very large group of people who do not have adequate access to key preventive health care services, all of which offer significant value as measured by health outcomes and cost-effectiveness: these people are the employed *and insured*.

This study was designed to begin to build a foundation of knowledge about the health promotion activities of employers in Washington State, with particular attention to those efforts—especially clinical preventive services—focused on chronic diseases. This foundation will inform efforts to develop effective, targeted health promotion assistance for the state's employers. We began our work with the assumption that employers are an appropriate focus for such assistance, and our research bore this out:

- Employers have direct access to a very large population of adult Washingtonians. Three million adults are employed in the state's civilian labor force.
- Employers are the source of health insurance for nearly two-thirds of all adults and children in Washington State. In 2004, 64 percent of the state's population (3.5 million adults and children) were covered by employer-sponsored health insurance.
- Employers are the source of health promotion, or *wellness*, programs for a growing population in Washington State.

Study Recommendations

Recommendation 1: Focus on Employers Who Offer Health Insurance

To reach 64 percent of the state's population and improve coverage of clinical preventive services and other health promotion activities.

Recommendation 2: Focus Information and Assistance on Large Employers—Those With 1,000 or More Employees

To reach a large segment of the employee population through a small number of contacts, and to change employer community norms.

Recommendation 3: Focus on Smaller Firms' Intermediaries

To reach Washington State's small-to-medium sized employers, who rely on intermediaries for information and assistance.

Recommendation 4: Include Disadvantaged Populations in all Employer Health Promotion Assistance

To ensure that access disparities and cultural differences are recognized and incorporated into workplace health promotion activities.

Recommendation 5: Create an Employers' Health Promotion Resource & Evaluation Center

To respond to a clear demand for accurate, reliable, objective health promotion information, assistance, tracking, and evaluation.

Our research also confirmed that the time is ripe for reaching out to employers in Washington State with health promotion assistance. The state's employers have a very real and immediate interest in health promotion benefits, policies, and programs and a significant need for information that, to date, has not been adequately met. Their needs are driven largely by cost concerns: not just the rising cost of health care services, but costs incurred from the effects of health status on workforce productivity. Our research found, for example, that employees in Washington State have high levels of health behaviors that negatively influence their health status, such as not receiving cholesterol and cancer screenings, not receiving annual influenza vaccination, not engaging in appropriate levels of physical activity, and using tobacco.

Employers also have a long-term interest in providing benefits that will enhance employee recruitment and retention. Changes in the age, gender, racial, and ethnic makeup of the state's labor force will continue over the next 25 years. These changes will affect the health status of the labor force overall and the types of health care services those who are employed need and demand. Thus, they will affect the types of health insurance benefits, policies, and programs employers offer. Research has shown, for example, that people age 55 and older, who will comprise over one in five workers in Washington State by 2030, have higher incidence and prevalence of chronic diseases and thus have higher demands for health care services. And the steady increase in the proportion of Asians, African Americans, and other racial and ethnic groups in the state's labor force will engender changes in the types of services most appropriate for employee health insurance benefits, policies, and programs.

The findings of our research not only offer a lay-of-the-land with regard to what is known about Washington employment-based health promotion activities today, they also point to gaps in knowledge and opportunities for action. Employers need information and assistance so that they can develop benefits, policies, and programs that research has shown will offer them, and their employees, the most value for their investment over both the short and long term. The following recommendations offer suggestions for effective next steps for designing and fielding employer health promotion assistance in Washington State.

II. Recommendations for Action

Recommendation 1: Focus on Employers Who Offer Health Insurance

This approach reaches almost two-thirds of the state's population and allows for improving coverage of clinical preventive services.

We recommend focusing health promotion assistance on employers who offer health insurance. These employers are the source of health insurance for nearly two-thirds of the state's population, including adults and children. They have a workplace infrastructure and culture in place for employee health benefits. And working with them takes strategic advantage of the nexus between employer-sponsored health insurance and other employer-sponsored health promotion programs: that is, these two types of benefits are often purchased within a firm by the same decision makers, under the same budget, using the same vendors and intermediaries (such as brokers, purchasing cooperatives, and unions).

We recommend, in particular, working with employers to enhance their coverage of clinical preventive services. This includes reviewing the services they already purchase and advising on adjustments they could make to ensure they are offering the most effective and cost-effective services for their employee population. Although employee access to clinical preventive services is almost always through health insurance, national research indicates that employers often do not purchase those services that offer them and their employees the greatest value as measured by health outcomes and cost effectiveness. For adults, these services include, among others, colorectal and cervical cancer screening, cholesterol screening, high blood pressure screening, influenza vaccination, and tobacco cessation counseling.

Recommendation 2: Focus Information and Assistance on Large Employers—Those With 1,000 or More Employees

This approach reaches a large segment of the employee population through a small number of contacts, with the potential for changing norms in the entire employer community.

We recommend first focusing on employers with 1,000 or more employees for health promotion assistance. Although most employers in Washington State are small—firms with 50 or fewer employees account for 84 percent of all firms in the state—they employ less than half of the state's workers. These small and medium-sized employers currently have limited leverage in the health insurance marketplace, and many have little absorptive capacity for workplace health promotion information and programs. Conversely, large employers make up a small proportion of the state's firms (less than 1 percent) but account for the largest proportion of the employee population: 17 percent, or over 450,000 people. They have much more leverage in the marketplace and often have designated staff who manage employee health benefits—a feature that facilitates approaching and working with them on health promotion activities. Thus, large employers represent a much stronger "best buy" for health promotion assistance in terms of achieving near-term return on investment.

Focusing health promotion assistance on large employers also offers the potential for changing norms across all employers in the state, regardless of size. Employers buy health insurance because it's *normative*—that is, it's something expected within the employment community. Our key informants illustrated this perception when they observed that offering health insurance is necessary to both recruit and retain employees, and that it is simply "the right thing to do." Helping large employers implement health promotion activities and increasing the number doing so can contribute to the perception among all employers in the state that providing these benefits is normative.

Large employers in Washington State include private-sector firms and State and local governments (for example, King County and the City of Seattle). Working with large governments before the smaller governments would reach a greater number of employees and, through the leadership of the large governments, offer greater potential for changing norms across all of the state's local governments.

Recommendation 3: Focus on Smaller Firms' Intermediaries

The best approach for Washington State's many small-to-medium sized employers who rely on intermediaries for information and assistance.

We recommend focusing health promotion assistance on the benefit intermediaries for medium and small employers. Intermediaries include, for example, insurance brokers, purchasing cooperatives, employer coalitions, union purchasers, and some third-party administrators. This is very likely the most efficient and effective approach for two reasons. First, there are over 180,000 employers in the state with fewer than 1,000 employees, and they account for 83 percent of all employees. Our research indicates that most of these medium and small employers do offer health insurance benefits (for example, in 2003, 97 percent of firms with 100 or more employees offered health insurance to their full-time employees), and most rely on intermediaries for their health benefit information and assistance needs. Our key informants illustrated this in most frequently naming insurance brokers as employers' primary health promotion information source.

The second reason to target intermediaries is that 180,000 is a very large number of employers to target for health promotion assistance. Targeting their intermediaries, instead, will make for fewer points of contact while reaching large numbers of employers and employees. Working with intermediaries also could make for more effective assistance for specific types and sizes of employers.

Recommendation 4: Include Disadvantaged Populations in All Employer Health Promotion Assistance

An approach that acknowledges potential disparities in access to and quality of health care services, and ensures that cultural differences are recognized and incorporated into workplace health promotion activities.

We recommend that all health promotion assistance includes a careful examination of the employer's workforce for socioeconomic status—for example, pay scale—and demographics, such as race and ethnic heritage. The goal is to ensure that employment-based health promotion activities are the most appropriate for the particular workforce at hand. In Washington State, both low income and lack of education among adults are associated with higher incidence, prevalence, and mortality from some chronic diseases, such as colorectal cancer, diabetes, and heart disease. Some racial and ethnic groups also have higher incidence and mortality from chronic diseases. Socioeconomic and demographic factors also are associated with health behaviors: for example, as income and education decrease, healthy eating and physical activity decline, and tobacco use increases. The proportion of adult Washingtonians who are overweight or obese also rises as income and education decline, and is higher among African Americans and American Indians.

Recommendation 5: Create an Employers' Health Promotion Resource & Evaluation Center

A strategy that responds to a clear and pressing demand for accurate, reliable, and objective health promotion information, assistance, tracking, and evaluation.

We recommend creating a resource center that will collect, develop, and disseminate objective, easy-to-use, and easy-to-access health promotion information for employers. Our research indicates that employers sorely need accurate, evidence-based information on health promotion activities from reliable, objective sources. They want information on both the effectiveness and cost-effectiveness of services—that is, some idea of the return they can expect on their health promotion investment. They want information targeted to their needs, offered through familiar and easy-to-access channels, and presented in ways they can readily assimilate.

To ensure that the proposed resource and evaluation center is objective and non-partisan, we recommend that it be housed in the public sector—for example, in a university or public health department. Funding can be provided by both the public and private sectors, with the understanding that providing financial support does not buy product endorsements.

Based on our research, we recommend that the center's activities include, at the least:

- Evaluating and disseminating *benchmarks* for health promotion benefits, policies, and programs. A *benchmark* is a standard or point of reference against which organizations compare their performance. In addition to the three expert, objective sources on health promotion best practices described in this report, many employers across the country are leading the development of innovative approaches to employee health promotion. Because workplaces present such a diversity of people and environments, reviewing, evaluating, and disseminating benchmark information on an array of the most current, effective health promotion approaches will provide an invaluable tool for employers, intermediaries, and all who work with employers to help them implement workplace health promotion.
- Creating a health promotion activity tracking system. This database system would be used to continuously track employer-sponsored health promotion activities to help ensure that the Resource and Evaluation Center is using the best, most current information to develop and provide effective health promotion technical assistance to employers.
- Creating a clearinghouse for information on health-promotion vendors in Washington State. The clearinghouse would be a public service available over the Internet, offering a single source for information on vendors available to Washington State employers.
- Evaluating the most popular HRA surveys and developing improvements that will enhance their utility for assessing and tracking health risk among employees. In

particular, we recommend creating surveys that are specific to those industries in Washington State that employ significant numbers of people.

The mission of the proposed Center will be to ensure that the best information on health promotion activities is readily available to employers in a form that is easy to use and easy to understand. To meet this mission, the Center's activities will be strategic in both disseminating new ideas and assisting employers in adopting them.

III. Recommendations for Additional Targeted Research

This study has pointed out several areas where additional research will help ensure that the health promotion assistance offered to employers is as targeted and effective, and as efficiently provided, as possible:

- A baseline study of benefit intermediaries in Washington State. Brokers and other intermediaries are hugely important sources of health benefit information for the state's employers, and have influence and leverage in the overall health care market. But we do not know much about them. This study would identify brokers and other intermediaries serving Washington State employers; develop an understanding of the services they provide and employer expectations with regard to health insurance and health promotion programs; and determine what kinds of health promotion assistance would offer the intermediaries and their employer clients the most benefit.
- A study of the current health promotion efforts of smaller employers in Washington State. Small employers dominate the employment market in Washington. Firms with fewer than 50 employees account for 84 percent of all firms and 41 percent of all employees. Firms with 50-999 employees account for another 4 percent of all firms but 42 percent of employees. This study would assess the current health promotion activities of small and medium employers; examine variations by industry, geography, or firm size; discover their current information and assistance sources; and determine the most effective approaches to providing health promotion assistance to these employers, whether directly or through working with intermediaries.
- A brief review and compilation of the findings of research on the uptake and effectiveness of health promotion interventions by various socioeconomic and demographic characteristics, with a focus on disadvantaged populations. The literature should include health promotion in various settings—that is, not just the workplace. This succinct overview of the most current knowledge can be developed into a tool that informs the design of health promotion assistance for Washington State employers.
- Additional randomized, controlled trials that assess short-term change and long-term maintenance of change in health behaviors as a result of physical activity and nutrition interventions in the workplace. Additional studies could examine the relationship between long-term change and return on investment.

The first two studies will help develop an understanding of the most effective approach to offering health promotion assistance to Washington State's very large population of medium-

to-small employers—over 180,000—and their intermediaries. And although they are targeted specifically to Washington State, once complete these studies could be used as models for other states interested in providing health promotion assistance to medium and small employers.

The third proposed study will contribute to developing the most effective health promotion assistance for various employees in any state. In particular, the findings can be developed into an easy-to-use tool—such as a small brochure or pamphlet—that employers, their intermediaries, and any other groups working with employers can use to help guide them in designing the most effective health promotion benefits, policies, and programs for a particular workforce.

The fourth proposed studies would fill a major gap in information about the long-term effectiveness of health-related lifestyle interventions, as measured by health behavior change and return on investment.

In addition, our research suggests that the relationship between employee health and workplace productivity could use substantially more investigation. Employers want firm information on the returns they will see from their health promotion investment not just in reduced or slowed health care spending but in improved productivity of their workforce. The science of measuring the health effects on productivity is, however, in its infancy. Increased and rigorous study of this relationship would go far in helping identify the most effective health promotion activities in terms of employee health and productivity and employer investment.

Summary

Our research findings underscore that we are now at a point where our ability to offer appropriate, targeted health promotion assistance to employers is keenly matched with their desire and need for such help. The five recommendations we offer provide a framework for improving and expanding on existing efforts to promote and support health promotion activities in Washington State workplaces. The additional research we propose supports the recommendations, ensuring that efforts to encourage employment-based health promotion activities are appropriately focused and effectively designed. Ultimately, the goal of all of this work is to improve the health of the population and key to these efforts, as articulated by the U.S. Department of Health and Human Services, is the recognition that the workplace is a place that can be conducive to good health.[1]

~ • ~

Appendix A: Research Methods

I. Research for Part II: Employment-Based Health Promotion Activities in Washington State – Literature Review

A. Information Sources

Our introductory literature search and review was designed to respond to this research question:

> *What is published in the research or grey literature, or is readily available via the Internet, that describes the health promotion activities of employers in Washington State?*

We turned to three literature sources: the published research literature, the World Wide Web, and the *grey literature*. *Grey literature* is literature not published through conventional channels, and includes a variety of publication formats—such as papers, reports, brochures, booklets, and pamphlets—prepared by a broad array of public and private-sector organizations.

We purposely used these three resources so that we could identify the kind of information that is publicly and readily available, what the information gaps are in such sources, and what next steps would fill these gaps. Our assumption was that this basic research approach would reveal that much of the information we seek cannot be found in publicly available hard-copy or on-line literature. Instead, such information could best be uncovered by reaching out directly to employers through mechanisms such as surveys, key informant interviews, and focus groups. Our preliminary review of the literature could thus lay the groundwork for future, primary research.

B. Research Focus: Wellness, Health Promotion, and Prevention

Wellness has become a catch-all word that encompasses a broad array of health promotion activities whether they are covered within an employer's health insurance benefit, are written into an employer's workplace policies, or are offered by an employer as a separate benefit of employment. A useful summary definition for *wellness* activities reads:

> *[Wellness activities are] educational and clinical services designed to improve patients' health by promoting healthy behaviors, such as eating well or exercising, and assisting them in altering unhealthy behaviors such as smoking.*[1]

The financing of wellness activities in many cases dictates how they are labeled or named in the marketplace—and hence in the literature. For example, a tobacco quit line might be referred to as a *health care service* if it is covered in a health insurance policy, or a *wellness activity* if it is offered as a program separate from health insurance. Because the service most often is the same however it is financed or named, our literature search required that we look for health promotion or wellness activities under a variety of labels. For example, we

searched both the research literature and employers' Web-based descriptions of health insurance benefits and other employee benefits for:

- Use of the words *preventive* (including, for example *preventive care* and *clinical preventive services), health promotion,* and *wellness*—among others—used in relation to any health insurance benefits or health promotion activities employers offered.
- Mention of specific health promotion activities, particularly those commonly referred to in the marketplace using the *wellness* label, such as tobacco quit lines, physical activity programs, gym memberships, and influenza vaccinations.

In this way our search was driven by several key terms and phrases.

C. Search Sources and Terms

C.1 Research Literature

We conducted our literature search using PubMed, a research database developed by the National Center for Biotechnology Information at the National Library of Medicine. We focused the search using "Washington State" as the primary search term in combination with various others, such as:

- employer and health promotion
- employer and clinical preventive services
- employer and prevention
- employer and wellness
- employer and preventive care
- employee and benefits
- employee and health
- employment and health
- workplace and health
- workplace and wellness
- smoking cessation
- tobacco cessation
- influenza vaccine
- flu shot

We excluded literature that addresses occupational health and workers' compensation.

We also searched the literature for targeted information on *wellness programs* or *wellness activities* as implemented by employers anywhere, limiting our search to those articles published in the past 3-4 years.

C.2 Internet

We used Google™ as our search engine to scan the Web for articles and information written about or by Washington State employers specifically regarding employer-sponsored health

promotion benefits, policies, and programs. In particular, we searched for specific references to wellness programs or activities or to services or activities that currently are considered to be within the health promotion context: for example, flu shots (or influenza vaccination), health club memberships, gym memberships, or participation in the American Cancer Society's *Active for Life* program. Our search was not designed to create a representative sample of industries or firm sizes in the state, nor was it exhaustive. It was a simple search intended, for the most part, to evaluate the Web as a potentially useful source of information for future research. The goal was simply to acquire information on at least five firms in each of three size categories:

- Large Firm – 1,000 or more employees
- Medium Firm – 250-999 employees
- Small Firm – 1-249 employees

Our operating theory was that we would find, at the least, some employer Web sites that provided descriptions of employee health insurance benefits. But we were interested in these and other sites only if they also offered:

- Some indication that their health insurance benefits included preventive care, or
- Some listing or description of other kinds of health promotion benefits, policies, or programs offered by the firm, regardless of the presence of a health insurance benefit.

We organized the search by defining a window of time in which we would scan the Web for information—bearing in mind that information on the Web is in constant flux. We started the search by looking for the Web sites of organizations that evaluated and ranked firms in Washington State on various workplace attributes. Among the sites we used were:

- *Washington CEO*, June 2003 Edition: "12th Annual Best Companies to Work For." (See www.washingtonceo.com)
- Association of Washington Business: "2003 Better Workplace Awards." (See www.awb.org)
- Association of Washington Business: "2002 Better Workplace Awards." (See www.awb.org)
- Association of Washington Business: "2001 Better Workplace Awards." (See www.awb.org)
- The Seattle Times, June 2003 Edition: "Northwest 100, 2003." (See http://seattletimes. nwsource.com/html/home/)
- Economic Development Council of Seattle & King County. (See www.edc-sea.org/index2.cfm)
- Bellevue Linux Users Group, "Major Corporations With Headquarters in Bellevue, Washington." (See www.bellevuelinux.org/bellevue_corporations.html)

- American Psychological Association: "Psychologically Healthy Workplace Award Winners, 2003."
  (See www.apapractice.org)

These Web sites became launching points for additional searches across the Web. We did not triangulate specific information found on Web sites to establish its reliability.

C.3 Grey Literature

Web sites are a rich resource for grey literature, and thus were our primary source. We also searched the on-line archived editions of the New York Library of Medicine's quarterly *Grey Literature Report* for applicable publications (see www.nyam.org/library/greyreport.shtml).

D. Effectiveness of the Research Approach

As anticipated, we found that the academic and research literature and the Web offer only limited information on whether and to what extent Washington State employers offer health promotion benefits, policies, and programs. The research literature had no such information, although a few studies used a sample of employees from Washington State to evaluate health promotion programs for specific types of employee populations.

Information available via the Web was largely employer-produced literature describing employee benefits packages, occasionally accompanied by information on employer-sponsored wellness activities. Although it is quite likely that many employers have printed literature on the employment benefits they offer, it appears that it is not consistently available via the Web.

II. Research for Part IV: Washington State Employers' Thoughts on Employment-Based Health Promotion Activities

A. Research Approach

We selected a small sample of ten stakeholders to interview. Our pool of potential interviewees was based on our expectation that they had strategic knowledge of employer-based health promotion efforts in Washington State. The sample was not designed to be representative of all possible employers or other stakeholders, but rather of five key categories of stakeholder types:

- Employers
- Health insurance brokers
- Health insurers/health plans
- Government purchaser
- Trade union

All participants were owners, top executives, or upper management, including human resources managers.[†]

We designed four interview protocols: one for each stakeholder type, except government purchaser (we used the employer protocol for this stakeholder). We grouped questions into five categories:

- Background Information—for example, location and size of organization; market area.
- Insurance Benefits and Workplace Wellness Programs—for example, type of insurance and other health promotion products offered (that is, purchased for employees or brokered/sold to employers); reasons for offering such programs.
- Workplace Health Policies—for example, policies other than occupational safety, such as a smoke free workplace.
- Program Administration—for example, evaluation of health promotion efforts; resources used for health promotion information and guidance.
- The Future—for example, opinion on future of employment-based health insurance and health promotion programs.

The employer protocol had an additional category, Workplace Health Policies. A sample protocol is provided, below.

We conducted individual interviews by telephone in August, September, and October 2004. All interviews were recorded by hand (not electronically) and were confidential.

B. Effectiveness of the Research Approach

We found the key informant interviews to be a rich source of direct information on the health promotion activities of employers in Washington State, and of their health promotion assistance needs. In future key informant research, we will modify some of the questions in the protocols to improve their clarity and the quality of the information they generate.

~ • ~

[†] For information on the power of small samples of key informants, and for sampling strategies, see: Needleman C and ML Needleman. Qualitative methods for intervention research. *Am J Ind Med* 29(4) Apr 1996: 329-337.

Washington State Employment-Based Health Promotion Activities
Key Informant Interviews

Employer

Background Information

[1] Where is *[business name]*_____located, and do you have more than one place of business? Where are the others?

[2] How many employees does your firm have?

[3] In general, what kinds of work do your employees perform?

For example:
- labor (blue collar): inside or outside?
- office work (white collar)
- service

[4] What is your role at *[business name]*_____?

Insurance Benefits and Workplace Wellness Programs

[5] What health insurance product(s) do you offer your employees at this time, and how many?

For example:
- HMO
- PPO
- Indemnity
- MSA/HSA

[6] Do any of these products include preventive care services, such as regular check-ups, periodic eye exams, or mammography or prostate screening?

[7] Why do you offer health insurance to your employees? What kinds of things influenced your decision to offer this benefit?

For example:
- competition for employees
- union demands or negotiations
- employee requests
- employee retention
- improve productivity
- federal, state, or local regulations
- "right thing to do"

[8] What criteria do you use to help you choose what to include in the health insurance benefit; that is, what is covered and not covered?

For example:
- cost
- union negotiations
- legal requirement to provide
- make-up of employees (such as gender, family size)
- type of work employees perform
- short-term or long-term benefits for the firm
- "right thing to do"

[9] Does your firm offer what are called *wellness programs*, such as smoking cessation or gym membership, either as part of your health insurance products or as a separate benefit? If yes, what programs do you offer?

_____

IF "YES" ON [9] ASK [10-11] — OTHERWISE GO TO [12]:

_____

[10] Why do you offer these wellness programs to your employees? What kinds of things influenced your decision to offer this benefit?

For example:
- competition for employees
- union demands or negotiations
- employee requests
- employee retention
- improve productivity
- federal, state, or local regulations
- "right thing to do"

[11] What criteria do you use to help you choose which wellness programs to offer?

For example:
- cost
- union negotiations
- legal requirement to provide
- make-up of employees (such as gender, family size)
- type of work employees perform
- short-term or long-term benefits for the firm
- "right thing to do"

_____

[12] Do you formally assess your employees' health care needs in any way to help you decide what insurance and/or wellness programs to offer them? For example, do you

measure or somehow quantify their current health, family size, age, or any personal risky behaviors they have, such as smoking?

[13] Who in your firm makes the *final* decision to purchase a health insurance product or implement a wellness program? *[no name, just title]*

For example:
- committee
- human resources person
- executive level (owner, CEO, head of a division, etc.: please identify title)

Workplace Health Policies

[14] Other than on-site worker safety policies, do you have any health-related workplace policies?

For example:
- No smoking or non-smoking areas
- No vending machines or restricted content in machines

[15] What kinds of things influence your firm to put such policies in place?

For example:
- employee complaints or demands
- union demands or negotiations
- employee retention
- improve productivity
- employee make up
- federal, state, or local regulations
- "right thing to do"

[16] Who makes decisions about what health *policies* to establish for your firm? *[no name, just title]*

For example:
- committee
- human resources person
- boss

Program Administration

[17] Do you keep track of how many people use your wellness programs, in particular, and which ones? (Can you give me a percentage of your overall workforce?)

For example:
- Number of employees who received flu shots
- Number of employees who sign up for gym memberships

[18] Do you measure the success of your wellness programs in any other way?

For example:
- survey employee satisfaction
- survey employee outcomes, such as number of employees who quit smoking

[19] When it comes to learning about the kinds of health insurance and wellness programs available, where does your firm get information?

For example:
- directly from insurers
- broker
- professional colleagues
- industry association or trade journals
- government publications
- employees

[20] Are there services or products you would like to see to help you learn more about employment-based wellness programs or on-site health policies?

For example:
- Web site with information and downloadable printed materials
- brochures, booklets, pamphlets
- seminars or workshops
- individual information meetings

The Future

[21] Do you see any changes coming in the way firms such as yours offer health insurance? How about for employers in general?

[22] Do you see a role for workplace-based wellness programs in the future? For all businesses or only some types?

Conclusion

[23] Is there anything else you would like to say about your firm's health and wellness benefits, programs, or policies?

Thank You

---

[1] North Carolina Institute of Medicine. *NC Consumer's Guide to Health Plan Selection. Glossary.* www.nciom.org/hmoconguide/GLOSS31E.html. Note: There are many appropriate definitions of *wellness program* that can be found via the World Wide Web.

Glossary

Active for Life (American Cancer Society)

A ten-week wellness program designed by the American Cancer Society specifically for adoption by employers, and particularly by their employees.

— (www.cancer.org/docroot/PED/content/PED_1_5X_Active_For_Life.asp)

ARC NW

A Pacific Northwest regional collaboration comprising community and volunteer organizations, employers, governments, health care systems, and research institutions brought together by the University of Washington Health Promotion Research Center (HPRC). The Alliance is one of eight centers across the nation established by the national Centers for Disease Control and prevention (CDC) and the National Cancer Institute. Together, they make up the national Cancer Prevention & Control Research Network.

— (See www.arcnw.org)

Behavioral Risk Factor Surveillance System

A survey administered and supported by the U.S. Centers for Disease Control and Prevention (Division of Adult and community Health, within the National Center for Chronic Disease Prevention and Health Promotion). The survey is given by all states and the District of Columbia to randomly selected adults age 18 and older to measure a variety of health behaviors and health system access issues. In Washington State, the Department of Health surveys an average of 300 adults each month, in English, and only by telephone.

Chronic Disease (or Condition)

A disease or condition that persists or progresses over a long period of time, often permanently—for example, cardiovascular disease, cancer, and diabetes.

Benchmark

A standard or point of reference against which organizations compare their performance.

Best Practices

A superior method or innovative practice that contributes to the improved performance of an organization, usually recognized as "best" by other peer organizations.

— (The American Society for Quality: www.asq.org/info/glossary/b.html.)

Catastrophic Health Insurance Policy

A high-deductible health insurance plan for unpredictable health care expenses.

Clinical Preventive Services

Interventions that health professionals provide in clinical settings to prevent disease and promote health. They are generally provided to all patients according to a recommended schedule, as opposed to diagnostic and treatment services that respond to patients'

symptoms and complaints. They include, for example, immunizations for children and adults, counseling to promote healthy behaviors such as exercise, and screening tests such as mammograms that detect disease before it is recognized.

Consumer-Directed Health Plan

Consumer directed health plans encompass an array of possible mechanisms for employed individuals to purchase health insurance. In general, the health plan enrollee is provided with catastrophic, or high-deductible, health insurance policy for unpredictable health care expenses, along with a health care spending account for predictable expenses.

Copayment

Amount that a member of a health plan has to pay for specific health services, such as visits to a physician.

Deductible

Cumulative amount a member of a health plan has to pay for services before the plan begins to cover the costs of care.

Grey Literature

Literature that is not published through conventional channels. It includes a variety of publication styles—such as papers, reports, brochures, booklets, and pamphlets—prepared by an array of public and private-sector organizations.

Health Behaviors

Behaviors of individuals that can protect, maintain, or promote their health, or that can detract from their health. Examples of the latter include smoking, lack of exercise, and poor eating habits.

Health Status

A measure of the extent to which an individual is able to function physically, emotionally and socially.

Incidence

The number of new cases of a disease, illness, disability, or behavior reported in a given time period (often a single year).

Intervention

A service delivered or undertaken to prevent or treat a medical condition or to modify a health behavior.

Labor Force

The labor force includes all persons classified as employed or unemployed as defined by the federal Bureau of Labor Statistics.

Mortality

A measure of deaths in a given population, location, or other grouping of interest.

Normative

Pertaining to the average or expected behavior patterns of a group or community.

— (Barker RL. 1995. *The Social Work Dictionary.* 3rd Ed. Washington, DC: NASW.)

Out of Pocket Costs

Total cost paid directly by consumers for insurance copayments and deductibles, prescription or over-the-counter drugs, and other services.

Premiums

The amount paid or payable in advance, often in monthly installments, for an insurance policy.

Presenteeism

Presenteeism currently has several definitions, all relating in various, yet dissimilar, ways to on-the-job effectiveness. The definition used in this paper was developed by MA Clark: "Presenteeism signifies that a number of employees, even those with perfect attendance records on the job, are nonetheless working with impairments and disabilities causing them to work less efficiently."

— (Clark MA. Vision benefits aid attack on "presenteeism," Employee Benefit News, December 2000. www.benefitnews.com/dental_vision/detail.cfm?id=1945.)

Prevalence (of a disease or condition)

The proportion of the population affected.

Preventive Care

Care designed to prevent disease altogether, to detect and treat it early, or to manage its course most effectively. Examples include immunizations and regular screenings, such as mammograms or cholesterol checks.

Race and Ethnicity

These terms are used in demographic and socioeconomic research to categorize populations. The national standards set by the Office of Management and Budget include five categories for data on race: 1) American Indian or Alaska Native, 2) Asian, 3) Black or African American, 4) Native Hawaiian or other Pacific Islander, and 5) White. the national standards for ethnicity include two categories: 2) Hispanic or Latino, and 2) not Hispanic or Latino.

Reinsurance

Insurance or indemnification by a second insurer of all or part of a risk assumed by the first insurer; part or all of the insurer's risk is assumed by other companies in return for part of the premium paid by the insured.

— (Merriam-Webster's Dictionary of Law 1996. Merriam-Webster's, Incorporated. Published under license with Merriam-Webster, Incorporated. Also: WordNet 1.7.1 Copyright © 2001 by Princeton University.)

Reserves

The amount of funds or assets necessary for a company to have at any given time to enable it, with interest and premiums paid as they shall accrue, to meet all claims on the

insurance then in force as they would mature according to the particular mortality table accepted.

— (*Brainy Dictionary*. www.brainydictionary.com/words/re/reserve212496.html.)

Risk Factor

In addition to health behaviors, other factors—such as family medical history, exposure to radiation or other cancer-causing agents, and certain genetic changes—that can increase a person's chances of developing a disease, illness, or injury.

Surveillance

In public health, surveillance means the collection, collation, analysis, and dissemination of data, or a type of study that involves continuous monitoring of disease occurrence within a population.

— (See, for example, The American Heritage® Stedman's Medical Dictionary Copyright © 2002, 2001, 1995 by Houghton Mifflin Company.)

Third-Party Administrator

Self-insured firms often use a third-party administrator, or TPA, to manage the administrative aspects of the health insurance benefits they offer, such as paying claims, providing printing services for booklets and ID cards, and promulgating treatment guidelines.

— (Univ. of WA Health Policy Analysis Program. 2002. Potential Regulation of Third Party Administrators. Prepared for the Washington State Office of the Insurance Commissioner.)

Unemployed Persons

The national Bureau of Labor Statistics definition of unemployed persons is persons 16 years and over who had no employment during the reference week, were available for work, except for temporary illness, and had made specific efforts to find employment some time during the four-week period ending with the reference week. Persons who were waiting to be recalled to a job from which they had been laid off need not have been looking for work to be classified as unemployed.

Wellness Activities

Educational and clinical services designed to improve patients' health by promoting healthy behaviors, such as eating well or exercising, and assisting them in altering unhealthy behaviors such as smoking.

— (North Carolina Institute of Medicine. *NC Consumer's Guide to Health Plan Selection. Glossary.* www.nciom.org/hmoconguide/GLOSS31E.html. Note: There are many appropriate definitions of wellness program that can be found via the World Wide Web.)

Health Promotion Research Center
Promoting Healthy Aging Through Community Partnerships

Alliance For Reducing Cancer, Northwest

1107 NE 45th Street, Suite 200
Seattle, WA 98105
206-543-2891
Fax: 206-543-8841
http://depts.washington.edu/hprc

University of Washington School of Public Health & Community Medicine